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COUNTY BOROUGH OF SOUTH SHIELDS.



ANNUAL REPORT OF THE
MEDICAL OFFICER OF HEALTH
FOR THE YEAR 1924.

WILLIAM NICOLL,

M.A., D.Sc., M.D., D.P.H.



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CHAIRMEN OF COMMITTEES.

Health Committee—ALDERMAN W. L. ROBERTSON, J.P.
Hospital and Sanatorium Sub-Committee—ALDERMAN W. L. ROBERTSON, J.P.
Venereal Diseases Sub-Committee—COUNCILLOR SUTCLIFFE, L.D.S., J.P.
Slaughterhouses Sub-Committee—ALDERMAN RICHARDSON, M.B.E., J.P.
Maternity and Child Welfare Committee—COUNCILLOR DRUERY, J.P.
Education Committee—ALDERMAN RICHARDSON, M.B.E., J.P.
School Medical Service Sub-Committee—COUNCILLOR EVANS.
Housing and Town Planning Committee—ALDERMAN DUNLOP.
Town Improvement Committee—ALDERMAN GIBBON, M.B., M.R.C.S., J.P.

STAFF OF PUBLIC HEALTH DEPARTMENT.

Post or Appointment.	Name.	Qualifications.
* Medical Officer of Health, Chief Tuberculosis Officer, Principal School Medical Officer, Bacteriologist, etc.	William Nicoll	M.A., D.Sc., M.D., D.P.H.
Clinical Medical Officer, Venereal Diseases, (Ap- pointed Deputy M.O.H., 2nd July, 1924)	J. G. Walker	M.R.C.S., L.R.C.P.
Tuberculosis Officer, and Resi- dent Medical Officer, Cleadow Park Sanatorium	E. T. D. Gaspey	M.D., M.R.C.S., L.R.C.P.
Assistant School Medical Officer	Bryce R. Nisbet	M.B., Ch.B.
Assistant Medical Officer, Maternity and Child Welfare and School Medical Services	Susan M. S. Jamieson	M.B., Ch.B., D.P.H.
Operating Surgeon, School Sur- gical Clinic	R. Crosby†	M.B., B.S., M.R.C.S.
Consultant Ophthalmologist ..	T. Gowans†	M.B., Ch.B.
School Dental Officers	P. W. Diack†	L.D.S.
	G. G. Robertson† . .	L.D.S.
Borough Analyst	J. T. Dunn†	D.Sc., F.I.C.
Superintendent of Public Abattoir, and Inspector under the Food & Drugs Acts, etc.	M. J. Pollock	

Staff of Public Health Department.—*Continued.*

Post or Appointment.	Name.	Qualifications.
District Sanitary and Housing Inspectors, etc.	W. Clark	Certificate R.S.I.
	R. W. Weir	Do.
	R. Ayre	Do.
	W. Hill	Do.
Inspector under the Shops Acts	W. Smith	Do.
Inspector of Midwives	Mrs. M. W. Arthur	Hospital Trained and C.M.B. Certificate.
Health Visitors, etc.	Miss P. M. Winter ..	Hospital Trained.
	Miss A. Smyth	Hospital Trained and C.M.B. Certificate.
	Mrs. T. Tubb	Do. do.
	(Resigned 26-7-24)	
	Miss A. Rothwell ..	Do. do.
	Miss J. Pottinger ..	Hospital Trained and R.S.I. Cert. (H.V.)
	Miss E. J. Smith....	Hospital Trained and C.M.B. Certificate.
	Miss M. Munro	Do. do.
	Miss R. Barrell	Do. do.
	(Commenced 30-6-24)	
	Mrs. J. Leete .....	....
Chief Clerk	J. Yeoman	Certificate R.S.I.
Clerks	C. Hymers	Do.
	J. Hilton .....	....
	G. A. Campbell ....	....
	F. H. Day .....	....
	H. Eardley .....	....
	Miss M. Shorey ....	....
	Miss G. C. Cooper ..	....
	Miss E. Park .....	....
Laborant	W. Combey .....	....
Matron, Deans Isolation Hospital	Miss H. Powell Evans	General and Fever Trained.
Sister-in-Charge, Cleadon Park Sanatorium	Miss L. Allison	Hospital Trained.
V.D. Clinic Nurse	Miss H. H. Coats ..	Hospital Trained and C.M.B. Certificate.
Tuberculosis Clinic Nurse	Mrs. N. F. Cordner ..	Do. do.

* Also Medical Officer to North East Durham Joint Smallpox Hospital Board.

‡ Part-time Officials, also in private practice.

Contribution is made by Exchequer Grants, etc., towards the salaries of the above-mentioned members of the staff excepting the Public Analyst, the Shops Inspector, and the Matron of the Isolation Hospital.

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SUMMARY OF GENERAL AND VITAL STATISTICS.

Area of Borough (including inland water but excluding foreshore and tidal water) ..		3,183 acres.
Population at 1921 census		118,599
Population, mid-year 1924, (Registrar General's estimate)		126,600
Density of population per acre		40
No. of insured persons, 1st January, 1925..		44,179
	Census 1921, (Old Borough).	Estimate 1924, (Extended Borough).
No. of buildings containing dwellings	14,005	15,100
No. of dwellings occupied by private families	24,355	25,500
No. of private families therein	26,054	27,000
Consolidated Rate, Rateable value at 2nd April, 1924		£518,096
Sum represented by a penny rate (Estimate for year 1924-25)		£1,930
Births during 1924 .. 3,071 Birth-rate ..	24.3	
Deaths during 1924.. 1,831 Death-rate ..	14.5	
Infant mortality rate.. 102 Neo-natal mortality rate		42
Maternal mortality rate, 5.2 per 1,000 births		
Tuberculosis death-rate: Pulmonary	1.28	
Non-Pulmonary..	0.34	

To the Chairman and Members of the Health Committee.

MR. CHAIRMAN AND GENTLEMEN,

I have the honour to submit herewith my Annual Report on the health and vital statistics of the Borough for the year 1924.

In my report for the previous year I was handicapped by the facts that I had been then in office for only three months, and that the staff of the department was, and had been for some considerable time, very far from complete. I referred to the alterations in staff which were then pending, and which were not actually effected till the following January. Later in the year, as a sequel to a visit of the Education Board's Medical Inspector, the question of the School Dental Service was raised anew, and was followed in due course by the appointment of a full-time School Dentist, in place of the two part-time dentists who had hitherto been engaged in this work. I may note here that, in accordance with the Board's prospective scheme, additional dental services will be required in the near future, necessitating, eventually, in all probability the appointment of a second full-time dentist to meet the Board's requirements.

In view of local economic conditions and in comparison with the country generally, the general health statistics of the Borough show an improvement, albeit slight, on those of the previous year. The devastating effects of the influenza epidemic which prevailed in the early part of the year were severely felt on Tyneside, and this Borough was one of the worst to suffer. Next to the memorable epidemic of 1918-19, this was the most serious which has affected the town for at least thirty years. As some measure of compensation, the period of nine months which followed the epidemic was one of the healthiest ever experienced in the history of the Borough in spite of the fact that the influenza scourge had left its mark in the shape of weakened constitutions amongst a considerable proportion of the population.

The birth-rate has continued its downward course not only in South Shields but throughout the whole country. The rate was 24.3 per thousand in the Borough as compared with 18.8 per thousand for the whole country, the figures for the previous year being 25.3 and 19.7 per thousand respectively. This is equivalent to a 4.6 per cent. decrease for the whole country, but only 4.0 per cent. decrease for South Shields.

The death-rate for the whole country increased from 11.6 per thousand in 1923 to 12.2 per thousand. In South Shields the rate

increased from 13.8 to 14.5 per thousand. This is equivalent to a 5 per cent. increase throughout the country, the increase in South Shields being in almost exactly the same proportion. In spite of the slight increase the death-rate for the year was nearly 3.0 per 1,000 better than the average for the previous ten years.

South Shields, moreover, shows a distinctly better state of affairs than the 104 other large towns, in which there was an average increase of about 6 per cent. in the death-rate during the year.

In correspondence with the increase in the general death-rate there was an increase in the infant mortality rate. In South Shields this increased from 94 to 102 per thousand births and for the whole country the increase was from 69 to 75 per thousand. In the other great towns the respective figures were 72 to 80. The rate of increase was only 8 per cent. for South Shields, as compared with 11 per cent. for the other large towns, which, however, is extremely poor consolation for the fact that our infant mortality rate is still so very much in excess of the average. Here again the influenza epidemic must undoubtedly be held accountable directly and indirectly for some of the increased infantile mortality. In this connection I must ask your consideration of my remarks on pages 14 and 64.

Following my comments in last year's Report on the increased number of deaths from tuberculosis in the Borough, every effort was directed towards effecting some improvement, with the gratifying result that the death-rate from all forms of the disease during the past year has reached the lowest figure ever recorded in the Borough. South Shields has been thus again brought into line with the rest of the country. One important alteration in the matter of tuberculosis registration must be pointed out. Hitherto it has been the procedure to remove from the register all cases who had remained free from signs of the disease for three years. This period has now been lengthened to five years, with the result that the number on the register shows an apparent increase. Even in spite of this alteration, however, the registered number at the end of the year was less than it was in January, 1923. It will be obvious from this that I had reason in my last report to reserve judgment as to the number of officially recognised cases of tuberculosis within the Borough.

During the year I took occasion to make an investigation of the conditions under which foodstuffs were handled and offered for sale within the Borough. A short report on this matter is included in the following pages under the section dealing with food.

One of the most urgent matters for consideration during the year was that of increased and improved hospital accommodation especially for cases of infectious diseases. This constituted the reason for a visit by an inspector from the Ministry of Health, and for a consultation with the Ministry's officials in London. The only tangible issue was the erection of some temporary huts in the grounds of the present hospital—obviously a makeshift arrangement.

The problem of the town's water supply gave occasion for special investigation, including consultations with the Water Company's officials and analyses of water samples in the Municipal Laboratory and elsewhere.

The last and far from the least important matter to which I must specially draw your attention is that of housing, particularly in the scheduled unhealthy areas. I made a large number of visits to these areas and personally inspected the majority of the individual houses and tenements therein.

My thanks are due to the various members of the Public Health staff, who have assisted loyally in the work of the department. I cannot avoid reference, however, to the generally prevailing feeling of discontent at the comparatively inadequate scale of salaries which is still adopted by the Council. There is no ignoring the fact that such a condition of affairs has had a tendency to jeopardise to a serious extent the efficiency of the service.

I have to acknowledge the helpful co-operation of my colleagues in other departments, and it gives me the greatest pleasure to place on record my appreciation of the effective interest of the members of the various Committees with which I have had the honour to be associated.

I am,

Mr. Chairman and Gentlemen,

Your obedient servant,

WILLIAM NICOLL.

VITAL STATISTICS.

POPULATION.

The Registrar General estimates the population of the Borough at June 30th, 1924, as 126,600.

This estimate is based on the "adjusted" population for 1921, after allowance for the rate of natural increase as evidenced by the excess of births over deaths and of migration as indicated from other sources of information such as the changes in the numbers on the Electoral Register, and the migration returns obtained from the Board of Trade. This estimate is supplied only for use in Vital Statistics.

BIRTHS.

Birth-rate.

The number of births registered in the Borough during the year 1924 was 3,087. From this number there must be deducted 38 births which occurred at Harton Institution and other addresses in the town of children whose mothers were non-residents of the Borough. On the other hand there are to be added 22 births among residents of the Borough who were temporarily away from the town.

The net number of births was thus 3,071, corresponding to a birth-rate of 24.3 per 1,000 of the population, as compared with 25.3 per thousand in the previous year.

This birth-rate is again the second lowest in the last fifty years, and is 11.8 per thousand below the average for that period.

The annual rates since 1871 are shown in the table on page 27.

The number of births reported to the Health Department under the Notification of Births Acts, etc., is referred to on page 62.

Distribution (Sexes : Legitimacy).

The distribution of the births with regard to sex and legitimacy is shown in the following table :—

Births.	Males.	Females.	Total.
Legitimate	1,516	1,461	2,977
Illegitimate	36	58	94
Total	1,552	1,519	3,071

The proportion of male to female births was 1,022 to 1,000.

The percentage of illegitimate births was 3.1, as compared with 4.1 in 1923, 4.0 in 1922, 4.4 in 1921, and 4.5 per cent. in 1920. There has thus been a distinct decline in the illegitimacy rate.

The total number of births in each of the wards of the town is given in the table on page 75.

Comparison of Birth-rate with rates for Country generally.

	Per 1,000 population.
England and Wales.....	18.8
105 County Boroughs and Great Towns	19.4
157 Smaller Towns	18.9
London	18.7
South Shields	24.3

The birth-rate in South Shields, as throughout the country generally, has declined during each of the past four years, a fact which may be correlated with the unstable economic conditions prevailing during that period.

DEATHS.

Death-rate.

1,831 deaths occurred during the year, the death-rate being 14.5 per 1,000 of the population.

The rate for England and Wales was 12.2 ; for the 105 Great Towns, 12.3 ; for the 157 Smaller Towns, 11.2 ; and for London, 12.1.

The South Shields death-rates since 1871 are given in the table on page 27.

There was an increase in the death-rate throughout the whole country of about 5 per cent. over the previous year. A similar rate of increase applied to South Shields. This was almost entirely due to the widespread epidemic of influenza and pneumonia during the first quarter of the year.

Causes of Death.

Tuberculosis caused 205 deaths, or 11 per cent. of the total deaths. Bronchitis (168) and pneumonia (143) were responsible for 17 per cent., and influenza (154) alone for 8.5 per cent.

Cancer caused 124 deaths, as compared with 126 in the previous year. Heart diseases accounted for 153, and infantile debility, etc., for 112, figures which are practically identical with those of the previous year.

The deaths from diarrhoeal diseases (68) were more than double those of the previous year, but the deaths from whooping cough (8) and measles (6) showed an enormous decrease on the figures for 1923 (viz., 57 and 83). There were only 46 deaths from accidents (a decrease of 10), and 30 from nephritis.

Age at Death.

Of the total deaths, 313 (*i.e.*, 17 per cent.) were of infants under one year old ; 197 (11 per cent.) were of children between the ages of 1 and 5 years ; 103 (6 per cent.) were aged 5 to 15 years ; 112 (6 per cent.) were from 15 to 25 years ; 107 (6 per cent.) were aged 25 to 35 years ; 136 (7 per cent.) were aged 35 to 45 years ; 261 (14 per cent.) were aged 45 to 60 years ; and 602 (33 per cent.) were over 60 years of age.

Although these figures appear somewhat similar to those reported last year it is to be noted that a decidedly larger number of people died over the age of sixty (602, as compared with 527 in 1923). The average age at death was approximately 38 years, as compared with 36 during the previous twelve months, a fact which may be taken as evidence of improved health conditions in the Borough.

Sex-Distribution of Deaths.

Of the total deaths, 964 were males and 867 were females, a proportion of 1,112 males to 1,000 females. The proportion of male deaths shows a very marked decrease as compared with 1923.

Seasonal Death-rate.

The following table gives the deaths and death-rates for each quarter of the years 1923 and 1924.

	No. of Deaths.		Death-rate.	
	1923	1924	1923	1924
First Quarter	*500	†688	16.1	21.7
Second Quarter ..	444	362	14.3	11.4
Third Quarter	357	375	11.5	11.8
Fourth Quarter ..	413	406	13.3	12.8

* 108 of these deaths were due to influenza, pneumonia and bronchitis.

† 294 " " " " " " "

This table shows the disastrous effect of the influenza epidemic in the first quarter of the year. During the other three quarters the figures compare very favourably with those of the previous year. The worst week was that ending February 2nd, which showed the excessive figure of 39.9 deaths per 1,000 population per annum. In striking contrast the second quarter of the year was unusually healthy.

Transferable Deaths.

70 deaths occurred outside the Borough among persons whose fixed or usual residence was in the town. These 70 are included in the total number of deaths (1,831) stated above, on which the death-rate of the town is based.

On the other hand, 149 deaths occurred within the Borough—principally in the Harton Hospital (129)—among persons belonging to other districts. These have been transferred to the districts concerned, and are not included in the total deaths for South Shields.

Deaths in Public Institutions.

The number of deaths of South Shields residents which occurred in public institutions during the year is as follows :—

In the South Shields Union Poor Law Institution	223
In the Ingham Infirmary, South Shields.....	72
In the Deans Hospital, South Shields	9
In Cleadon Park Sanatorium, South Shields	1
In Institutions outside the Borough.....	46

This makes a total of 351, which is 19 per cent. of all the deaths during the year. In the years 1921, 1922 and 1923, the percentage was 18, 20 and 18 respectively.

Coroner's Inquests.

64 deaths among residents of South Shields were the subject of inquests by Coroners. Accidents, injuries, and other forms of violence accounted for 45 of such deaths. Further details are given in Table I., page 23.

The proportion of inquests is much below the figure for the previous year, and very much below the average for the other great towns in England and Wales.

Uncertified Deaths.

68 deaths (3.7 per cent. of the total deaths) were not certified by medical practitioners or by the Coroner. Of this number 9 were infants under one year old ; and 8 were children aged one to five years.

The percentage of uncertified deaths throughout the country was as under :—

England and Wales.....	1.1 per cent.
105 County Boroughs and Great Towns	0.6 „
157 Smaller Towns	1.2 „
London	0.1 „

The high percentage of such deaths in South Shields is due to the fact that the Coroner for the Borough also serves a large area in the Administrative County of Durham. All deaths which have not been certified by doctors are reported to him, but he is satisfied that inquests are unnecessary in many cases.

Deaths from Principal Epidemic Diseases.

The seven “ principal epidemic diseases ” caused 88 deaths, as follows :—

Diarrhoea and enteritis (under two years)	51
Diphtheria	14
Scarlet fever.....	8
Whooping cough	8
Measles	6
“ Fever ” (enteric, typhus, and simple continued fever)	1
Smallpox	0

Generally speaking, a marked improvement has to be recorded under this heading, the death-rate for the year being 0.69 per thousand, as compared with 1.47 per thousand in 1923. This was entirely due to the fact that measles and whooping cough were much less prevalent and less fatal. On the other hand infantile diarrhoea assumed more serious proportions. Diphtheria and scarlet fever also appeared to be of a more virulent type.

Comparison of South Shields Death-Rates with those of the Country generally.

The following table shows the provisional annual death-rates in England and Wales for 1924 :—

	Death-rate per 1,000 Population							Deaths per 1,000 Births.	
	All Causes.	Enteric Fever.	Smallpox.	Measles.	Scarlet Fever.	Whooping Cough.	Diphtheria.	Diarrhoea and Enteritis (under 2 years).	Infant Mortality Rate.
England and Wales	12.2	0.01	0.00	0.12	0.02	0.10	0.06	7.3	75
105 County Boroughs and Great Towns	12.3	0.01	0.00	0.18	0.03	0.12	0.08	9.2	80
157 Smaller Towns	11.2	0.01	0.00	0.08	0.02	0.09	0.06	6.2	71
London	12.1	0.01	..	0.29	0.03	0.11	0.12	8.4	69
South Shields	14.5	0.01	..	0.05	0.06	0.06	0.11	16.5	102

The outstanding feature in this table is the excessively high infantile mortality rate in South Shields, and particularly the excessive rate from infantile diarrhoea. There is but little question that bad domestic conditions and defective or inadequate sanitation are responsible for much of this. Ignorance and carelessness in the feeding of infants are other factors which are unfortunately only too common in the Borough. The extremely depressed economic situation must also be held accountable to a quite considerable extent.

I have naturally felt some concern during the past year at the appreciable increase in the death-rate in the Borough, and I have, on that account, taken steps to ascertain the condition of affairs in a number of other boroughs of similar size throughout the country. In my introductory remarks I pointed out that a corresponding increase had taken place in most other boroughs during the year, and that South Shields compared favourably with the average.

The following table, compiled from the Registrar General's weekly returns, gives the number of deaths compared with the number of births expressed in percentage. The figures are subject to slight correction, depending on the number of transferable births and deaths :—

South Shields	57	Walthamstow	62
(corrected figure 60)		Middlesbrough	63
Coventry	57	Preston	70
Derby	59	Leyton	77
Gateshead	61	Stockport	83
Norwich	62	Blackburn	89

It is evident from the above table that in spite of the high infantile mortality rate, South Shields occupies quite a good position amongst towns of its own status. In fact throughout the whole of England there were not more than 30 Boroughs which showed better figures during the year. As seen in the table, the neighbouring boroughs of Gateshead and Middlesbrough show (uncorrected) figures of 61 and 63 respectively, while the corresponding uncorrected figures for Newcastle, Sunderland and West Hartlepool were 54, 57, and 58 respectively.

The outstanding fact which arises from the foregoing remarks is that many, if not most, other large towns have effected a reduction in their infant mortality rate partly, and in some cases largely, *by reducing their birth-rate*, thus giving their infants a better economic chance of survival. It remains to be seen if South Shields cannot set the excellent example of achieving the same end without adopting the same means. I am confident that this can

and will be achieved by the wisely directed efforts of the Maternity and Child Welfare Committee. Further encouragement of existing infant welfare work, the opening of additional maternity centres, especially in the Tyne Dock and Laygate areas, and the provision of the long-awaited Maternity Hospital will all contribute towards this end.

Ward Distribution of Deaths.

The lowest death-rate for the year was recorded in West Park Ward (10.9 per thousand). Westoe (11.2), and Tyne Dock (11.7) also showed good rates. The worst Wards were Shields (23.3), Holborn (21.9), and Laygate (20.9). It is evident that the mortality in Shields and Holborn is more than double that in West Park and Westoe. This may afford the Housing and Town Planning Committee matter for reflection and provide further incentive to schemes for reconstruction and improvement. Had the conditions in Shields Ward been the same as, or similar to, those in West Park there would possibly have been a saving of nearly 90 lives during the year in that Ward alone.

A comparison and contrast between these two wards gives indication of the lines along which health policy should be most effectively directed. For instance, influenza attacked West Park just as badly as it did Shields, which is not surprising, since we know that this disease is no respecter of social position or environment. On the other hand the death-rate from tuberculosis was more than twice as great in Shields as in West Park, obviously a reflection of the domestic conditions. Cancer and heart diseases do not display much difference in the two localities. Diseases of the lungs (pneumonia and bronchitis) however, exhibit glaring difference in the two districts. The death-rate from these diseases was actually more than *six times as great* in Shields as it was in West Park. It is, however, when we come to consider diarrhoea and other digestive diseases that the most outstanding discrepancy is apparent, for we find that the mortality rate from these diseases in Shields and Holborn Wards was about *twenty times* the rate in West Park and Westoe. Finally in Shields and Holborn the mortality from congenital and ante-natal causes was nearly three times as great as that in Westoe and West Park. While it would be manifestly unwise to draw too far-reaching conclusions from the limited statistics available in any one year, the figures quoted above serve to emphasize the difference in the health conditions in the respective districts.

TABLE 1.—CAUSES OF DEATH, during 1924, of Persons belonging to the County Borough of South Shields, classified in accordance with the Registrar-General's Manual of the International List of 1911, as adapted for use in England and Wales.

(This list has been abridged by omitting headings against which no deaths have been recorded during the year.)

CAUSES OF DEATH.	M.	F.	All Ages.	AGES AT DEATH.													55 to 60 upwards.	55						
				0-3 Months.	3-6 Months.	6-12 Months.	Total under 1 year.	1-	2-	3-	4-	Total under 5 years.	5-	10-	15-	20-			25-	35-	45-	55-	65-	75-
I.—GENERAL DISEASES.																								
1. Enteric fever	1	..	1	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..
4. Malaria	2	..	2	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..
6. Measles	3	3	6	..	..	..	..	1	2	1	..	4	2	..	..	..	..	..	..	..	..	..	..	..
7. Scarlet fever	3	5	8	..	..	..	..	1	2	1	1	5	2	..	..	..	..	1	..	..	..	..	..	..
8. Whooping cough	3	5	8	1	..	1	2	4	..	1	..	7	1	..	..	..	..	..	..	..	..	..	..	..
9. A. Diphtheria.	5	9	14	..	..	1	1	1	3	5	..	10	3	1	..	..	..	..	..	..	..	..	..	..
C. Croup	1	..	1	..	..	..	..	..	..	1	..	1	..	..	..	..	..	..	..	..	..	..	..	..
10. Influenza	71	83	154	..	4	6	10	13	5	5	7	40	11	2	5	8	10	14	24	20	12	..	11	
14. Dysentery	1	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	1	
18. Erysipelas	2	2	4	..	1	..	1	..	..	..	..	1	..	1	..	..	..	..	..	..	1	..	..	
19. C. Varicella.	1	..	1	..	1	..	1	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	
20. A. Pyæmia	..	1	1	1	..	..	1	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	
28. A. Pulmonary tuberculosis (not acute)	66	55	121	..	..	..	..	2	1	1	2	6	4	8	14	21	29	24	11	4	..	..	2	
B. phthisis (not defined as tuberculous nor acute)	19	10	29	..	..	..	..	..	..	..	..	..	..	..	6	5	8	6	3	1	..	..	1	
29. A. Acute phthisis	2	4	6	..	..	..	..	..	..	..	..	..	..	2	1	..	..	1	2	..	..	..	..	
B. Acute miliary tuberculosis	4	2	6	..	..	..	..	..	1	..	..	1	1	1	1	1	1	..	..	..	..	..	..	
30. Tuberculous meningitis.	4	7	11	1	..	..	1	1	..	1	1	4	2	..	..	..	1	..	..	..	..	..	..	
31. A. Tabes mesenterica	2	..	2	..	1	..	1	..	1	..	..	2	..	..	..	..	..	..	..	..	..	..	..	
B. Other peritoneal and intestinal tubercle.	6	3	9	..	..	..	..	2	..	2	..	4	2	..	..	..	3	..	..	..	..	..	..	

TABLE 1.—CONTINUED.

CAUSES OF DEATH.	AGES AT DEATH.															55 to 60 upwards.											
	M.	F.	All Ages.	0-3 Months.	3-6 Months.	6-12 Months.	Total under 1 year.	1-	2-	3-	4-	Total under 5 years.	5-	10-	15-		20-	25-	35-	45-	55-	65-	75-	85 and upwards.			
64. A. Apoplexy	11	8	19	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	1	..	6	6	4	2	4		
E. Cerebral hæmorrhage	23	22	45	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	3	5	15	15	6	..	5		
65. Softening of brain	5	1	6	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3	..	1	2	..	..		
66. Paralysis without specified cause :—																											
A. Hemiplegia	1	1	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	..	..	..		
C. Other forms of paralysis	..	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	..	..	..		
67. General paralysis of the insane	11	1	12	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	5	2	2	3	..	..	2		
68. Other forms of mental alienation	1	1	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	2	1	1	..	..	..		
69. Epilepsy	7	3	10	..	..	1	1	..	..	..	..	1	..	1	3	..	..	..	1	2	1	1	..	..	..		
70. B. Other forms of convulsions	3	1	4	..	..	..	..	..	..	..	..	..	1	2	..	..	..	..	1	1	..	..	..	..	..		
71. Infantile convulsions (under 5 years) :—																											
A. Convulsions with teething	5	..	5	..	25	1	1	4	..	..	..	5	..	..	..	..	..	..	..	..	..	..	..	..	..		
B. Other infantile convulsions	29	9	38	3	6	3	34	3	..	..	1	38	..	..	..	..	..	..	..	..	..	..	..	..	..		
73. B. Neuritis	..	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..		
74. C. Cerebral tumour	..	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..		
76. A. Mastoid disease	3	1	4	..	..	..	..	..	..	..	..	..	..	2	..	1	..	..	..	1	..	..	..	..	..		
B. Other diseases of the ear	1	..	1	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..		
III.—DISEASES OF THE CIRCULATORY SYSTEM.																											
78. A. Acute myocarditis	1	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	
B. Infective endocarditis	2	1	3	..	..	..	..	..	..	..	..	..	..	..	..	..	2	1	..	..	..	..	..	..	..	..	
C. Other acute endocarditis	2	1	3	..	..	..	..	..	..	..	1	1	..	..	..	1	..	1	..	..	..	..	..	..	..	..	
79. A. Valvular disease	40	52	92	..	..	..	..	..	..	..	1	1	1	1	..	3	7	6	11	23	25	14	1	1	10		

TABLE 1.—CONTINUED.

CAUSES OF DEATH	M.	F.	All Ages.	AGES AT DEATH.												85 and upwards	55 to 60						
				0-3 Months.	3-6 Months.	6-12 Months.	Total under 1 year.	1-2	2-3	4-	Total under 5 years.	5-	10-	15-	20-			25-	35-	45-	55-	65-	75-
150. C. Congenital malformation of heart	4	1	5	4	4	..	4	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..
D. Other congenital malformations	3	1	4	1	3	..	4	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
XI.—DISEASES OF EARLY INFANCY.																							
151. A. Premature birth	42	36	78	78	..	..	78	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
B. Infantile atrophy, debility, and marasmus	14	8	22	21	1	..	22	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
C. Icterus neonatorum	1	1	2	2	..	..	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
E. Want of breast milk	1	..	1	1	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
152. B. Atelectasis	1	3	4	4	..	..	4	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
C. Injuries at birth	1	1	2	2	..	..	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
XII.—OLD AGE.																							
154. A. Senile dementia	1	3	4	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	1	1	..	..	..
B. Senile decay	54	66	120	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	30	69	20	..	..
XIII.—AFFECTIONS PRODUCED BY EXTERNAL CAUSES.																							
155. Suicide by poison	..	2	2	..	..	..	..	..	..	..	..	..	..	..	..	..	2	..	..	..	..	..	..
156. " asphyxia	..	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
157. " hanging or strangulation	1	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..
160. " cutting or piercing instruments	1	1	2	..	..	..	..	..	..	..	..	..	..	..	..	1	1	..	..	..	..	..	..

167. Burns (conflagration excepted) ..	4	3	7	..	1	..	1	..	1	3	1	..	..	..	..	..	..	..	..	..	..	..	1	..	..
168. Absorption of deleterious gases (conflagration excepted)	2	1	3	1	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
169. Accidental drowning	13	..	13	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
172. Injury by fall	3	4	7	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	1	..	..	
173. " in mines and quarries	3	..	3	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
175. " other crushing (vehicles, &c.) ..	6	..	6	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
185. Fractures (cause not specified)	..	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
XIV.—ILL-DEFINED CAUSES.																									
188. A. Syncope (aged 1 year and under 70)	2	2	4	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
189. A. Heart failure (aged 1 year and under 70)	9	4	13	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	
B. Atrophy, debility, marasmus (aged 1 year and under 70)	1	1	2	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	2	
E. Other ill-defined deaths	..	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
F. Cause not specified	..	1	1	1	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
TOTALS—Males			964	100	37	42	179	62	20	17	20	298	25	24	38	31	48	61	100	121	129	79	10	54	
Females			867	77	22	35	134	43	18	19	7	212	40	14	16	27	59	75	65	106	118	108	27	42	

TABLE 2.—DEATHS DURING 1924 : SEASONAL AND WARD DISTRIBUTION.

CAUSES OF DEATH.	YEAR, 1924.				WARDS.																
	Total.	First Quarter.	Second Quarter.	Third Quarter.	Fourth Quarter.	Shields.	Beacon.	St. Hilda.	Hadrian.	Holborn.	Laygate.	Victoria.	Bents.	Rekendyke.	Westoe.	Deans.	Tyne Dock.	Simonside.	West Park.	Harton.	Unknown.*
		1763 68	664 24	351 11	362 13	386 20	154 10	110 3	102 5	137 6	131 6	152 4	151 3	99 2	143 6	98 4	138 10	118 3	88 2	95 3	28 1	19 ...
All Causes { { Certified { Uncertified	1	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Enteric fever	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Smallpox	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Measles	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Scarlet fever	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Whooping cough	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Diphtheria and croup	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Influenza	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Erysipelas	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Phthisis (pulmonary tuberculosis)	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Tuberculous meningitis	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Other tuberculous diseases	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Cancer, malignant disease	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Rheumatic fever...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Meningitis	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Organic heart disease	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Bronchitis	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Pneumonia (all forms)	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Other diseases of respiratory organs	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Diarrhoea and enteritis	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Appendicitis and typhilitis	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Cirrhosis of liver	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Alcoholism	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Nephritis and Bright's disease	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Puerperal fever	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Other accidents and diseases of pregnancy and parturition	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Congenital debility and malformation, including premature birth	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Violent deaths, excluding suicide	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Suicide	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Other defined diseases...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Diseases ill-defined or unknown	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Total	1831	688	362	375	406	164	113	107	143	137	156	154	101	149	102	148	121	90	93	29	19

* Deaths in Union Hospital of persons with no fixed abode.

TABLE 3.—DEATHS DURING 1924 IN INSTITUTIONS ; UNCERTIFIED DEATHS, etc.

CAUSES OF DEATH.	Deaths in Institutions in the Borough.		Deaths of S.S. residents in Institutions outside the Borough.*	Deaths Certified by Coroner.		Uncertified Deaths.		Transferable Deaths,	
	Residents	Non-Residents		Residents	Non-Residents.	Residents	Non-Residents.	Inward.	Outward.
Enteric fever	...	...	...	...	...	...	...	...	...
Smallpox	...	...	...	...	...	...	...	...	...
Measles	...	...	...	...	...	...	...	...	...
Scarlet fever	3	...	...	...	...	...	...	...	...
Whooping cough	1	...	...	...	...	1	...	1	...
Diphtheria and croup	6	1	1	...	...	3	...	1	1
Influenza	...	11	3	3	...	1	...	...	...
Erysipelas	29	1	...	...	...	1	...	...	...
Phthisis (pulmonary tuberculosis)	...	1	...	...	...	...	...	...	...
Tuberculous meningitis	16	4	...	...	...	...	...	...	...
Other tuberculous diseases	19	6	...	...	...	...	...	...	...
Cancer, malignant disease	2	1	9	...	1	...	...	9	8
Rheumatic fever	1	...	...	...	...	...	...	...	1
Meningitis	25	19	...	...	...	2	...	...	...
Organic heart disease	13	10	...	...	...	5	...	1	20
Bronchitis	6	1	1	4	...	4	...	1	10
Pneumonia (all forms)	4	1	2	...	...	...	...	4	1
Other diseases of respiratory organs	9	1	1	...	...	1	...	1	1
Diarrhoea and enteritis	10	2	6	...	...	1	...	7	1
Appendicitis and typhlitis	1	...	1	1	...	...	...	1	2
Cirrhosis of liver	1	...	...	...	...	...	...	...	...
Alcoholism	3	5	...	1	...	1	...	1	...
Nephritis and Bright's disease	2	2	1	1	...	...	...	...	5
Puerperal fever	3	...	...	...	...	...	...	...	2
Other accidents and diseases of pregnancy and parturition...	4	...	...	...	...	...	...	...	...
Congenital debility and malformation including premature birth	13	3	3	39	11	...	...	16	5
Violent deaths, excluding suicide	1	7	...	6	1	...	...	22	11
Suicide... .. .	131	61	16	8	1	33	...	...	1
Other defined diseases	2	...	...	1	...	14	1	1	...
Diseases ill-defined or unknown	...	...	...	...	...	...	...	...	...
Total	305	136	46	64	14	68	1	70	149

* The Union Poor Law Hospital is now situated within the Borough.

TABLE 4.—POPULATION, BIRTHS, AND DEATHS FOR 1924 AND PREVIOUS YEARS.

Year.	Popula- tion estimated to middle of each year.	Births.			Total Deaths registered in the Borough.		Transfer- able Deaths		Net Deaths belonging to the Borough.			
		Uncor- rected Num- ber.	Net.				Of Non-Residents registered in the Borough.	Of Residents not registered in the Borough.	Under 1 Year of Age.		At All Ages.	
			Num- ber.	Rate.	Num- ber.	Rate.			Num- ber.	Rate per 1,000 Net Births.	Num- ber.	Rate
1	2	3	4	5	6	7	8	9	10	11	12	13
1911	108,844	3,279	3,300	30.3	1,687	15.5	13	216	484	147	1,890	17.4
1912	109,678	3,322	3,352	30.6	1,550	14.1	18	220	356	106	1,752	16.0
1913	110,513	3,478	3,495	31.1	1,803	16.1	21	229	408	117	2,011	17.9
1914	110,604	3,503	3,517	31.8	1,753	15.9	15	217	482	137	1,955	17.7
1915	109,855	3,265	3,275	29.6	1,871	17.0	28	287	468	143	2,130	19.4
1916	109,332	3,091	3,093	26.0	1,649	14.9	44	257	369	119	1,862	17.0
1917	106,500	2,699	2,714	22.8	1,750	13.4	33	271	362	133	1,9 8	18.6
1918	105,659	2,979	3,005	25.4	2,122	20.1	41	313	359	118	2,394	22.6
1919	111,502	3,104	3,130	26.9	1,687	15.1	37	242	370	118	1,892	17.0
1920	115,945	3,922	3,966	34.2	1,738	15.0	26	288	479	121	2,000	17.2
1921	118,400	3,464	3,507	29.6	1,541	13.0	12	272	335	96	1,801	15.2
1922	122,400	3,287	3,257	26.6	1,738	14.2	109	56	307	94	1,685	13.8
1923	124,500	3,152	3,144	25.3	1,766	14.2	110	58	297	94	1,714	13.8
1924	126,600	3,087	3,071	24.3	1,910	15.1	149	70	313	102	1,831	14.5

NOTES.—(A) The rates in Columns 5, 7, and 13 are calculated per 1,000 of the population.

(B) The populations for the years 1915 onwards are the Registrar General's estimates of the *civilian* population.

For each of the years 1916, 1917, 1918, and 1919, the Registrar-General supplied two estimates of population:—

(1) for calculating birth-rates,

(2) „ „ death-rates.

The birth-rate population for those years was respectively 118,955; 118,717; 118,387; and 116,152. The *death-rate* (or *civilian*) population is shown in the table above.

(C) “Transferable Deaths” are deaths of persons who, having a fixed or usual residence in England or Wales, die in a district other than that in which they resided.

The large increase in the number of non-residents recorded since 1921 in column 8, and the decrease in the number of transferable deaths in column 9, is due to the Harton Poor Law Institution now being situated within the Borough.

TABLE 5.—BIRTH-RATES, INFANT MORTALITY RATES, AND DEATH-RATES FROM VARIOUS CAUSES, 1871-1924.

YEAR.	Estimated Population.	Birth-rate.	Death-rate.	PRINCIPAL EPIDEMIC DISEASES.								Phthisis.	Cancer.	Bronchitis.	Pneumonia.	Influenza.	Deaths under 1 year per 1,000 births.
				Total.	Smallpox.	Measles.	Scarlet Fever.	++ Diphtheria.	Whooping Cough.	"Fever."	X Diarrhoea.						
Mean 1871-1880	50,580	43.1	25.5	6.0	.86	.42	1.44	.12	.78	.79	1.59	1.91	—	—	—	—	164
Mean 1881-1890	66,520	38.8	20.5	2.3	.01	.34	.45	.10	.44	.19	.78	1.84	—	—	—	—	140
Mean 1891-1900	87,022	36.1	20.1	2.45	.00	.44	.22	.11	.46	.28	.93	1.60	1.00	2.00	1.47	.29	166
1901	97,800	36.8	20.6	3.36	..	.68	.60	.14	.10	.22	1.60	1.63	.71	1.35	1.19	.18	169
1902*	101,801	36.9	19.8	2.66	.04	.93	.38	.06	1.02	.06	.17	1.81	.66	1.36	1.54	.12	149
1903	102,561	35.4	17.6	1.04	.01	.15	.12	.16	.03	.10	.49	1.72	.73	1.70	1.37	.17	132
1904	103,327	35.9	18.9	1.84	.07	.27	.08	.12	.62	.09	.60	1.59	.85	1.69	1.42	.26	144
1905	104,099	33.6	17.1	2.07	.04	.23	.06	.23	.61	.22	.68	1.21	.62	1.56	1.31	.19	145
1906	104,876	33.7	19.0	2.94	..	1.04	.06	.29	.37	.09	1.10	1.58	.72	1.39	1.35	.24	150
1907	105,659	31.0	18.0	1.53	..	.46	.09	.18	.51	.04	.26	1.69	.75	1.43	1.33	.33	133
1908	106,448	32.7	16.8	1.98	..	.30	.08	.22	.46	.08	.85	1.29	.67	1.24	1.04	.37	133
1909	107,244	31.6	16.6	1.50	..	.35	.18	.19	.34	.04	.41	1.21	.63	1.27	1.13	.29	138
1910	108,045	31.5	15.2	1.50	.02	.16	.06	.06	.59	.06	.56	1.25	.70	1.10	1.17	.29	111
Mean 1901-1910	104,186	33.9	17.9	2.03	.02	.45	.17	.16	.47	.10	.66	1.50	.71	1.41	1.28	.25	140
1911	108,844	30.3	17.4	2.07	..	.37	.01	.08	.21	.04	1.36	1.19	.58	1.33	1.56	.26	147
1912	109,678	30.6	16.0	1.39	..	.58	.05	.05	.46	.05	.18	1.53	.39	1.50	1.25	.22	106
1913	110,513	31.1	17.9	1.59	..	.51	.28	.07	.10	.06	.57	1.33	.66	1.48	1.28	.36	117.
1914	110,604	31.8	17.7	2.23	..	.27	.22	.14	.52	.14	.95	1.31	.58	1.49	1.67	.21	137
1915†	109,855	29.6	19.4	1.84	..	.46	.17	.07	.41	.02	.70	1.67	.67	2.21	2.07	.18	143
1916	109,332	26.0	17.0	0.83	.01	.07	.08	.11	.19	.01	.36	1.73	.68	1.81	1.50	.09	119
1917	106,500	22.8	18.6	1.74	..	1.14	.01	.07	.12	.01	.38	1.96	.71	1.83	1.81	.07	133
1918	105,659	25.4	22.6	1.11	..	..	.02	.11	.47	..	.51	1.93	.61	1.85	2.01	4.36	118
1919	111,502	26.9	17.0	1.04	..	.37	.04	.09	.01	.01	.53	1.30	.63	1.53	1.56	1.84	118
1920	115,945	34.2	17.2	0.90	.01	..	.01	.11	.15	.04	.58	1.35	.41	2.16	1.98	.83	121
Mean 1911-1920	109,843	28.9	18.1	1.47	.00	.38	.09	.09	.26	.04	.61	1.53	.59	1.72	1.67	.84	126
Mean 1871-1920	83,630	36.1	20.4	2.78	.10	.41	.47	.12	.48	.28	.91	1.68	—	—	—	—	147
1921	118,400	29.6	15.2	1.37	..	.37	.03	.10	.23	.02	.62	1.44	.36	1.23	0.89	.49	96
1922	122,400	26.6	13.8	0.51	..	..	.02	.07	.17	.01	.24	1.29	.39	1.30	1.30	.72	94
1923	124,500	25.3	13.8	1.47	..	.67	.04	.08	.46	..	.22	1.40	.43	1.03	1.05	.15	94
1924	126,600	24.3	14.5	0.69	..	.05	.06	.11	.06	.01	.40	1.28	.34	1.33	1.13	1.22	102

* The Borough was extended, November, 1901, and again in November, 1921.

X Diarrhoea and Enteritis (under 2 years of age) since 1905.

Since 1891, Membranous Group has been included under Diphtheria.
† See note (B) to Table 4, as regards population since 1915.

NOTIFIABLE DISEASES.

There were no additions to or removals from the list of notifiable diseases during the year.

Prevalence.

The following table shows the number of cases of acute infectious disease notified during each of the past ten years :—

Disease.	1915	1916	1917	1918	1919	1920	1921	1922	1923	1924
Smallpox	1	5	2	..	1	..	..	..	..	1
Chickenpox	..	210	..	..	..	..	..	..	..	..
Scarlet fever	925	363	128	76	146	146	601	210	364	734
Diphtheria	35	41	36	26	40	34	49	61	77	68
Measles	..	429	3936	57	2396	..	..	..	..	..
German measles	..	32	199	11	14	..	..	..	..	..
Enteric fever	9	7	5	12	7	10	5	5	9	12
Continued fever	1	..	..	..	..	..	..	..	..	..
Dysentery	..	..	..	..	8	5	2	1	..	..
Malaria	..	..	..	..	36	14	5	2	2	1
Cerebro-spinal fever	1	3	2	2	..	..	..	..	..	1
Polio-myelitis	2	1	1	..	..	..	2	1	1	3
Polio-encephalitis	..	..	..	..	..	..	..	1	..	..
Encephalitis lethargica ..	..	..	..	..	6	4	7	3	3	9
Pneumonia : primary	..	..	..	..	64	264	185	352	336	423
Pneumonia : influenzal ..	..	..	..	..	78	60	40	81	15	108
Puerperal fever	4	5	..	..	2	4	3	2	3	5
Erysipelas	57	55	35	27	41	28	36	27	29	25
Ophthalmia neonatorum ..	36	52	23	26	36	50	26	25	32	19

The year 1924 has been memorable for the disastrous epidemic of influenza-pneumonia which swept over the town in the first three months, the worst visitation since 1919; and for the widespread and persistent outbreak of scarlet fever which has not been so prevalent in the Borough since 1915. The influenza epidemic reached its climax in February after which it abruptly ceased, but pneumonia continued to be unduly prevalent till the end of March. The scarlet fever epidemic started at the usual time—towards the end of summer—and continued throughout the rest of the year, reaching its highest point in October. There were therefore only two months—May and June—of the year, during which conditions could be considered as comparatively normal.

Following the influenza epidemic came the usual crop of cases of sleepy sickness (encephalitis lethargica) of which nine were notified to the department.

The age-incidence of the cases notified in 1924, the number which occurred in each ward of the town, together with the number removed to hospital, and the deaths from each disease will be found in table 6, page 40.

Reference to notification of tuberculosis is made on page 44.

There were no cases of continued fever, dysentery, relapsing fever, cholera, plague, polio-encephalitis, trench fever or typhus fever reported during the year.

Seasonal Incidence.

The following table shows the number of cases notified in each month of the year 1924 :—

DISEASE.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
Smallpox	..	..	..	1	..	..	..	..	..	..	..	..	1
Scarlet fever	43	49	39	37	45	31	59	63	85	112	81	90	734
Diphtheria	11	8	5	9	6	..	5	8	2	3	5	6	68
Enteric fever	..	..	1	..	..	..	2	..	3	5	1	..	12
Malaria	..	..	..	..	1	..	..	..	..	..	..	..	1
Polio-myelitis	1	..	..	1	..	1	..	..	..	..	..	..	3
Cerebro-spinal fever	..	..	..	..	..	..	..	..	1	..	..	..	1
Encephalitis lethargica	..	..	..	1	2	3	1	1	..	..	..	1	9
Primary pneumonia	54	96	65	29	20	12	18	19	21	21	31	37	423
Influenzal pneumonia	20	60	3	5	1	2	1	1	..	3	7	5	108
Puerperal fever	..	..	1	1	1	1	..	..	..	1	..	..	5
Erysipelas	3	1	..	1	1	2	2	2	2	3	3	5	25
Ophthalmia neonatorum	2	1	2	1	4	1	2	2	2	..	1	1	19
TOTAL	134	215	116	86	81	53	90	96	116	148	129	145	1409

Diseases in detail.

SMALLPOX.—One case was notified in the person of an apprentice seaman, who had landed the previous day from a ship on which cases had occurred during the voyage. Why the case was allowed to land is difficult to understand, and only the prompt action of the local doctor who was called in to see the patient prevented a possible spread of the disease in the borough. The patient was removed to hospital without delay, and no further cases occurred. Six contacts of this case were kept under observation for the prescribed period.

Two other persons (a child and an Arab seaman) were reported to me as suspected cases, but in each case I satisfied myself that they were negative.

28 contacts with cases outside the Borough were also reported and kept under observation. In no case did any symptom of the disease arise.

SCARLET FEVER.—734 cases were notified during the year, this being the largest number in any year since 1915. The attack-rate per 1,000 of population was 5.8. Of the total cases 547, *i.e.*, 75 per cent., were removed to hospital. Nearly twice as many patients were treated in the hospital this year as compared with the previous year. Despite this it is obvious that nearly two hundred patients had to be treated in their own homes. Towards the end of the year I urged the Committee to engage the services of a temporary nurse to assist in visiting home-treated cases, but her services were not obtained before the end of the year.

The incidence of the disease was greatest in Westoe (9 cases per 1,000 persons) and least in Shields Ward (3 cases per 1,000).

Nearly two-thirds of the cases (65 per cent.) occurred in children of school age (5—15 years).

There were 8 deaths from the disease, 3 in the Deans Hospital, and 5 at their own homes. The case mortality was 11 per thousand, which is a much better result than the mortality of 16 per thousand recorded in the previous year. It is also worthy of serious comment that only 3 cases died out of the 547 treated in the Deans Hospital, whereas 5 of the 187 cases treated at home died, the mortality rate for the hospital cases being only 5 per thousand as compared with 27 per thousand for the cases treated at home. It would appear, therefore, that the child treated in hospital had a far better chance (at least 5 to 1) than the case that was treated in its own home. Such figures must surely afford convincing proof of the urgent necessity for extended hospital accommodation.

There has been much discussion of late years on the merits of treating scarlet fever patients at their own homes, and it has been urged that they would do just as well at home as in hospital. This might not be impossible if the patients received the same accommodation, treatment, and nursing attention as they do in hospital. But, in South Shields homes at any rate, I am afraid they do not. Moreover, the risk of extensive spread of an epidemic by home-treatment is so great that in my opinion it is unjustifiable in all

but a small proportion of cases. There is little, if any, doubt in my mind that the excessive increase in the number of cases of scarlet fever in the latter part of the year was due largely, if not entirely, to the lack of sufficient isolation hospital accommodation in the Borough.

108 cases of scarlet fever were secondary to cases which had already occurred in the same house or institution. Of these, 36 were notified at the same time as the primary case and 72 at a later date. This is a larger number than was the case in the previous year, but the proportion of secondary cases to the total number was practically the same in each of the two years.

There were 22 instances in which patients discharged from hospital appear to have infected other members of their household ("return cases"). In one of these instances there was a distinct element of doubt, and in a second case infection was derived from a patient who was discharged from hospital at the urgent request of its parent before it was certified as free from infection.

The percentage of secondary and "return" cases is much the same as in the previous year, and is remarkably small in view of the local circumstances and the magnitude of the epidemic. There can be little doubt that most of the secondary cases were the result of (1) delay on the part of the parent in calling in a doctor, (2) delay in notification of the primary case, or (3) delay in removal of the primary case.

There must always exist, in the midst of a big epidemic a certain dubiety as to whether the so-called "return" case has not really acquired infection from a source other than a patient who has been recently discharged from hospital.

PNEUMONIA.—There was a great increase in the number of notifications of the influenzal type of this disease, but judging by the death returns this year's epidemic was apparently less serious than that of 1918-19.

Altogether 531 cases were *notified*, 423 being primary and 108 influenzal, but there were probably several other cases which either received no medical attention or were not notified. At any rate there were 18 cases (3 influenzal and 15 others) in which the first intimation received by the Health Department was the record of the patient's death from the Registrar. In each of these instances a communication was addressed to the medical practitioner concerned reminding him of the notification requirements. On the whole, however, it is probable that these requirements are adhered to as closely in South Shields as elsewhere.

As already mentioned, the epidemic was most severe in the first three months of the year, during which period more than half the total number of cases occurred. Nearly one-third of all the cases of primary pneumonia, and as many as one-half of the cases of influenzal pneumonia died. This high mortality rate appears to be characteristic of the type of pneumonia which prevails in the North Eastern part of England.

37 of the deaths from pneumonia (all forms) occurred in children under the age of twelve months, and 54 between the ages of one and 5 years, so that this disease alone accounted for nearly one-eighth of all the deaths of infants under one year, and as much as one-fourth of all the deaths of children between the ages of one and five.

As in the previous year the most seriously affected parts of the town were Shields and St. Hilda Wards, while this year Simon-side and Bents Wards suffered the least.

About 250 pneumonia jackets were distributed to necessitous cases on the request of their private medical attendants.

ENTERIC FEVER.—During the year 12 cases were notified, and one proved fatal. Five of the cases were removed to the Deans Hospital, the others being treated at home.

These 12 cases occurred in 11 separate houses in only two of which was there w.c. accommodation, the others having privy receptacles.

Seven of the cases were reported from Beacon Ward ; 5 attended Baring Street School.

Of the five cases treated at the Deans Hospital two were found to be suffering from pneumonia and not enteric. In the other three cases the diagnosis was verified. All five patients recovered. One of these cases was a ship's mess-room boy in whom the onset of the disease occurred whilst at sea.

Of the seven home-treated cases, one died—a fisherman, aged 20 ; in this case infection appears to have been acquired on board ship.

Another case, a girl aged 7, was brought into the Borough from North Shields, where both her parents had been removed to hospital reported to be suffering from enteric fever. She was ill on leaving North Shields, and obviously contracted her illness there.

The remaining five home-treated cases included four children attending Baring Street School, and a young married woman. In each case the diagnosis was somewhat doubtful though in two of the cases bacteriological examination gave a slightly positive reaction to paratyphoid but not to typhoid. All these patients recovered.

In certain of these cases there was a suspicion that infection might have occurred on the occasion of an excursion to Ponteland, where several of the children are reported to have drunk water from a well. At my request Dr. Holmes, Medical Officer of Health, Castle Ward R.D.C., obtained a bacteriological report on a sample of water from this well, the result being negative.

It may be noted that at or before the time these cases occurred in South Shields, a number of cases were reported in Tynemouth. Dr. Hislop, Medical Officer of Health, Tynemouth, with whom I communicated on the matter, informed me that the cases in that Borough were associated with a supply of ice cream from a certain vendor who was reported to be in the habit of visiting South Shields once a week, but who was not known to visit the locality in which our cases occurred.

DIPHTHERIA.—The number of cases notified was 68, which is 9 less than in the previous year, but 21 above the average for the past ten years. There can be little doubt that the increased prevalence of this disease in the Borough during the past four years is due in part at least to lack of isolation accommodation in the hospital. For this reason only six cases could be admitted during the whole year, the remainder being treated at home. As a consequence of this the amount of diphtheria antitoxin which was supplied free to medical practitioners was 436,000 units, as compared with 238,000 units in the previous year.

As a further and more serious consequence there were 14 deaths from the disease, this being a death-rate of .11 per thousand population, compared with .08 per thousand in 1923, and a case mortality rate of 20.6 per cent. compared with 13.0 per cent. in 1923. This death-rate and case mortality rate would almost certainly have been materially reduced had it been possible to provide more adequate hospital accommodation and treatment.

There was no suspicion of any epidemic, most of the cases occurring singly in different parts of the town. Rekendyke was the ward in which the largest number of cases occurred.

Most of the cases (75 per cent.) occurred in children under ten and most of the deaths (71 per cent.) in infants under 4 years.

ENCEPHALITIS LETHARGICA.—Nine cases of sleepy sickness were notified, three of which were removed to hospital. The very fatal nature of this disease is evidenced by the fact that eight of the cases died, and only one recovered. It is of some significance that the majority of these cases occurred shortly following the influenza epidemic. The patients were mostly young adults between the ages of 20 and 40.

POLIOMYELITIS (ACUTE).—Three cases of this disease were notified, all in children under ten. One of the cases—an infant under twelve months—died.

CEREBRO SPINAL FEVER.—One case was notified—a baby under twelve months old—which was fatal.

MALARIA.—There was one notification—a case of a seaman who contracted the illness on the West Coast of Africa three years previously. The case proved fatal.

One other malaria patient, an ex-service man, died of influenzal pneumonia.

ERYSIPELAS.—25 cases were notified, and there was one death.

PUERPERAL FEVER.—There were 5 cases with 2 deaths. One other death occurred from puerperal septicaemia, but the case was not notified. This is referred to again under the Maternity and Child Welfare Section on page 73.

OPHTHALMIA NEONATORUM.—19 cases were notified this year, as compared with 32 in the previous year, a very substantial reduction. This result may be due to greater attention on the part of doctors and midwives. Further details are to be found under the Maternity and Child Welfare Section on page 72.

Non-notifiable Diseases.

WHOOPING COUGH.—This disease was not nearly so prevalent nor so fatal as it was in 1923, so far as could be judged from the reports available to the Health Office. Altogether 106 actual and suspected cases were reported by school teachers or in other ways. The houses of these patients were all visited by the health visitors, and it was found that doctors were in attendance on more than half the cases (56 per cent.)

The greater number of cases were reported towards the end of the year, in November and December. There were eight deaths (3 boys, 5 girls) mostly of infants under 2 years of age.

MEASLES.—This disease was also much less prevalent than in the previous year, the number of cases which came to the notice of the Department being 493, as compared with 1,595 in the previous year. The fatality, moreover, was very much less, there being only 6 deaths (3 boys and 3 girls) as compared with 83 deaths in the previous year. The largest proportion of cases occurred in the summer months (May—July). The houses of these patients were visited by the health visitors, and it was found that about two-thirds (62 per cent.) were receiving or had received medical attention.

CHICKENPOX.—616 cases were reported to the Department, and it was ascertained that about half (54 per cent.) of the patients were receiving medical attention. The majority of the cases occurred towards the end of the year, chiefly in October and November. Only one death occurred—a baby of 3 months.

INFANTILE DIARRHOEA AND ENTERITIS.—There were 51 deaths from this disease in children under two years of age, the death rate being 16.5 per thousand births. This compares badly with the rate for England and Wales, which was only 7.3 per thousand, and for the large towns, which was 9.2 per thousand; but in spite of that it is 1.4 per thousand better than the average rate in South Shields for the past ten years. •

It may be noted that not only in children, but at all ages, diarrhoea and enteritis was considerably more frequent and more fatal this year than in the previous year.

ISOLATION HOSPITALS.

Accommodation.

It would be much more appropriate to write "Lack of Accommodation," for the present hospital is totally inadequate to deal with an epidemic of even a single disease, and the accommodation falls lamentably short of the *minimum* suggested by the Ministry. During the course of the year I had occasion to make special report on this matter, and to point out that according to the Ministry's standard the hospital had, up to December, reasonable accommodation for only 49 patients, and yet during a considerable part of the year, owing to housing and domestic conditions, it was deemed imperative to endeavour to secure isolation for a number greatly in excess of this.

Towards the end of the year it was realised that the hospital itself was becoming dangerously overcrowded, and that the available nursing staff was quite inadequate to attend to all the patients. It was decided, therefore, to limit admissions to strictly urgent cases, and to endeavour to secure some nursing attention for those cases which could not be admitted. The latter provision, however, was not available up to the end of the year.

The evil effects of this overcrowding were evidenced by the number of cases of chickenpox and measles which developed in the hospital. While this event is liable to occur even in the most commodious and best equipped isolation hospitals, ample means is usually available for preventing or dealing with this emergency. In the Deans Hospital such is absolutely non-existent.

In the first place there is not even a pretence of an "observation" block for dealing with doubtful cases on admission—a most essential feature of an isolation hospital. In the second place there is no segregation block in which to accommodate cases which develop other diseases while in hospital, and so reduce the risk of further spread. These are the factors which must be held accountable for the comparatively large number of cases of measles and chickenpox which occurred in the hospital during the year, and which greatly militated against its efficiency as an isolation hospital.

The details of these cross infections may well be mentioned here, as follows :—

41 cases of scarlet fever developed chickenpox.

12 „ „ „ measles.

In addition there was considerable trouble with otorrhoea (ear discharge). It was found that 13 cases had otorrhoea on admission to hospital, and 41 developed this trouble while in hospital. The treatment of this complication which is apt to become chronic and lead to permanent deafness occupied a large amount of the time and attention of the nursing staff. Moreover it involved retaining many patients in hospital much beyond the usual period, so holding up beds which were urgently required for the treatment of other cases. The results, however, were satisfactory in so far that of the 54 cases of discharging ears all but seven left the hospital cured, or at least temporarily cured.

Following my report to the Hospitals Sub-Committee it was decided to proceed with the erection of additional temporary accommodation in the shape of wooden huts. The scheme adopted by the Committee comprised a hut to contain 12 beds for patients, and a hut extension for nurses' quarters, containing 5 rooms, together with a protected wooden corridor connecting the huts with the main building. This work was in progress, but had not been completed at the end of the year.

Moreover, somewhat extensive alterations and additions to the laundry, which had been recommended during the previous year, were, after much annoying delay, completed in May. This involved an addition of two laundry maids to the permanent staff of the hospital. These do all the work formerly carried out by several part-time women. The services of an extra man were also necessitated to attend to the laundry machinery and boilers, and to assist in the general care of the hospital premises.

Cases treated during 1924.

The following table shows the number of cases treated at the Deans Hospital during 1924 :—

Notified Diseases.	Remain- ing in on Dec. 31st, 1923.	Ad- mitted during 1924.	Dis- charged	Died.	Remain- ing in on Dec. 31st, 1924.
Scarlet fever	66	547	538	4	71
Enteric fever	..	5	5	..	..
Diphtheria	..	6	5	1	..
Encephalitis lethargica	..	3	..	3	..
Pneumonia	..	1	..	1	..
Totals	66	562	548	9	71

The average daily number of cases under treatment in Hospital is shown below :—

Notified Diseases.	Jan.	Feb.	Mar.	April.	May.	June.	July.	August.	Sept.	Oct.	Nov.	Dec.	Average.
Scarlet fever	68	60	53	47	46	59	58	63	79	97	106	75	68
Enteric fever	..	..	1	0	..	..	2	0	0	1	1	1	1
Diphtheria	..	1	0	..	1	1	0	0	1	..	..	..	0
Other	0	..	..	..	0	..	0	..	0	1	0	..	0
Totals ..	68	61	54	47	47	60	60	63	80	99	107	76	69

Results of Hospital Treatment.

In comparison with the figures for 1923 it will be noted that the hospital treatment of infectious diseases was attended with much better results during 1924 in spite of the greatly increased number of patients and the consequent greater amount of work thrown upon the medical and nursing staff. It is, therefore, with much pleasure that I record my thanks to the matron and nurses at the hospital.

There were only 9 deaths amongst the total of 628 patients treated, a case mortality rate of only 14.3 per thousand as compared with the rate of 30.0 per thousand (12 deaths in 400 patients) during the previous year. This seems to indicate a substantial improvement in hospital treatment. It might be argued that this much improved result was due to the fact that so few cases of diphtheria were treated in the hospital, but even allowing for this, and dealing only with scarlet fever and enteric fever we find that the case mortality rate of hospital treated cases in 1924 was only 6.5 per thousand as compared with 12.3 per thousand in 1923, which shows a similarly favourable result for the year 1924 as compared with 1923. For scarlet fever alone the mortality rate was 6.5, as compared with 9.4 in 1923.

SCARLET FEVER.—547 cases were admitted to hospital during the year, the highest number in hospital at any one time being 116 on November 8th and 9th, and the lowest number 39 on May 6th, 7th, and 12th. The corresponding figures for the previous year were 80 and 10 respectively.

The average length of stay in hospital (excluding cases which died) was 45 days as compared with 49 days in the previous year. This reduction was due partly to the greatly increased demand for accommodation.

Comment has already been made (on page 36) on the outbreaks of chickenpox and measles amongst children suffering from scarlet fever.

The four deaths occurred after the patients had been 4, 16, 32 and 20 days in hospital respectively, death in the case of the fourth mentioned being primarily due to broncho-pneumonia.

ENTERIC FEVER.—5 cases were admitted to hospital, all of whom recovered. In at least two of these cases the diagnosis was very doubtful.

DIPHTHERIA.—Only 6 cases were treated in hospital and 5 recovered. The sixth case died within 10 hours of admission, and it was in my opinion not in a fit state to have been removed from its home.

ENCEPHALITIS LETHARGICA.—Three cases of this disease were admitted and all died. The deaths occurred after 5, 7, and 45 days in hospital respectively.

PNEUMONIA.—One case was admitted from the sanatorium in a critical condition, and died 4 days after. The patient was affected with pulmonary tuberculosis.

SMALLPOX.—One case introduced into the Borough, was removed to Whiteleas Hospital. The patient who was stated to have been vaccinated in infancy but showed no marks of vaccination, suffered from a semi-confluent attack of smallpox.

He was under treatment in the hospital for 8 weeks and made a good recovery, apart from slight impairment of vision in one eye. The advice of Dr. Gowans was obtained in consultation with regard to the condition of the eye and treatment was carried out in accordance with his suggestions.

Two suspected cases were also admitted, but proved negative. Twenty-two contacts of these cases were also removed to hospital for two days for disinfection purposes.

TABLE 6 — CASES OF, AND DEATHS FROM, NOTIFIABLE INFECTIOUS DISEASE IN SOUTH SHIELDS DURING THE YEAR 1924.

Notifiable Diseases.	No. of Cases notified.												No. of Cases notified in each Ward.													No. of Deaths. *																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																														
	At following Ages—Years.												At all ages.	Shields.	Beacon.	St. Hilda.	Hadrian.	Holborn.	Laygate.	Victoria.	Bents.	Rekendyke.	Westoe.	Deans.	Tyne Dock.	Sithonside.	West Park.	Harton.	Harton Institution. †	No. of Cases admitted to Hospital.	At all Ages.	At following Ages—Years.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																								
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Smallpox	1												2	3	2	5	4	1	8	1	11	8	7	2	3	7	2	1	6	1	14																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																									

* Including inward transferable deaths and cases not previously notified, but excluding outward transfers.

† Non-residents of the Borough and permanent inmates of the Institution. Other cases admitted to the Institution have been distributed in the wards according to their previous home address in the Borough.

§ Reference to notification of tuberculosis is made on page 44.

SUMMARY OF NURSING ARRANGEMENTS, HOSPITALS AND OTHER INSTITUTIONS AVAILABLE IN THE DISTRICT.

PROFESSIONAL NURSING IN THE HOME.—There are no arrangements for providing nursing assistance, voluntary or otherwise, in the Borough, except such provision as may be made by the Poor Law Authority.

The local Nursing Division of St. John Ambulance has a store of nursing requisites and sick room utensils which are loaned to patients at a small charge, or free in necessitous cases. The local Division has no trained nurses for domiciliary cases, but some of its ambulance sisters visit homes of patients for dressings, etc.

MIDWIVES.—No midwives as such are employed or subsidised by the Local Authority. There were 27 midwives practising in the Borough at the end of the year, apart from midwives on the indoor staff of the Poor Law Union Hospital.

CLINICS.—The following clinics are provided by the Council :—
Tuberculosis Clinic—Town Hall.

Maternity and Child Welfare Centres (Treatment and consultation). (1)—Town Hall.

(2)—St. Hilda's School, Coronation Street.

School Clinics (1)—Town Hall (Minor Ailments, Refraction, X-ray).

(2)—Wesley Street (Dental and Surgical, and Cleansing Station).

Venereal Diseases Clinic—Deans Hospital.

There are no Day Nurseries.

HOSPITALS.—The hospitals provided by the Local Authority are the Isolation Hospital, Dean Road, and the Tuberculosis Sanatorium, Cleadon Park.

Occasionally, when beds are not available at the Cleadon Park Sanatorium, cases of tuberculosis in ex-service pensioners are sent to Barrasford Sanatorium (Newcastle-upon-Tyne Corporation), and tuberculous children to Stannington Sanatorium (Poor Children's Holiday Association) at the cost of the Town Council, but beds are not *reserved* by the Council at these Institutions.

The Council is one of the constituent authorities of the North East Durham Joint Smallpox Hospital Board, which maintains the Whiteleas Smallpox Hospital. The Medical Officer of Health of South Shields at present acts as Medical Superintendent of this Hospital.

There are no maternity or children's hospitals in the Borough.

The Ingham Infirmary (voluntary institution) contains 80 beds, mostly for surgical cases. The Council have an agreement with the Governors of the Infirmary whereby cases of surgical tuberculosis referred by the Tuberculosis Officer are treated in the Infirmary at the expense of the Council.

Other hospitals used by the inhabitants are :—

The Royal Victoria Infirmary, Newcastle-upon-Tyne.

The Eye Infirmary, Newcastle-upon-Tyne.

The Fleming Memorial Hospital for Children, Newcastle-upon-Tyne.

The Throat, Nose, and Ear Hospital, Newcastle-upon-Tyne.

The Eye Infirmary, Sunderland.

The Harton Hospital (Poor Law) which serves a large area of N.E. Durham, (including South Shields County Borough, South Shields Rural District, Borough of Jarrow, and Urban District of Hebburn), is situated within the Borough.

INSTITUTIONAL PROVISION FOR UNMARRIED MOTHERS, ILLEGITIMATE INFANTS, AND HOMELESS CHILDREN.—No institutional provision is made by the Local Authority.

St. Verca's Home (Church of England), the Salvation Army Home, and the Edward Brough Home (Poor Children's Holiday Association) are maintained in South Shields by the respective authorities mentioned.

AMBULANCE FACILITIES.—The Council provide a motor ambulance at the Deans Hospital for the removal of cases of infectious disease.

The police motor ambulance is maintained for accident and other non-infectious cases.

Two motor ambulances are provided by the Poor Law Guardians, and a horse-drawn ambulance by the local branch of the St. John Nursing Association for general purposes.

MUNICIPAL LABORATORY.

The following table shows in detail the examinations of pathological material carried out during the year in the Municipal Laboratory at the Health Department, Town Hall.

Nature of Examination.

Swabs for diphtheria bacilli	297
Sputum for tubercle bacilli.....	330
Blood for Widal re-action	19
Faeces for B. typhosus	2
Pus for gonococci.....	3
Hair for ringworm	27
Urine for chemical and microscopical examination	85
Preparation of media.	

The work done in the Laboratory was considerably greater than in 1923, chiefly owing to the increased number of examinations made for the Maternity Centre, and for the Tuberculosis Department.

In addition bacteriological work is done at the Venereal Diseases Clinic, and specimens were sent from the Venereal Diseases Clinic to the College of Medicine, Newcastle, for examination (see page 57):

Several cultures of various bacteria for testing purposes in connection with enteric fever cases were supplied gratuitously by the Standards Laboratory (Medical Research Council) at my request.

Small stocks of diphtheria antitoxin for the use of general practitioners are maintained at the Health Department, Town Hall, and at the Deans Hospital. Arseno-benzol compounds are available at the Venereal Diseases Clinic, and are supplied free of charge on written application from doctors who possess the qualifications specified by the Ministry of Health.

Collosol argentum is supplied free to midwives.

TUBERCULOSIS.

Incidence of Tuberculosis.

Number of South Shields residents on tuberculosis Register on 1st January, 1924	1,642
Number of cases notified during 1924	381
Number of cases removed from Register during 1924....	241
Total number of South Shields residents on Register on 31st December, 1924	1,782
Number of ex-service men at the end of 1924 who were suffering from tuberculosis due to or aggravated by service	91

The reasons for removal from the Register were :—

Died from tuberculosis	180
Died from causes other than tuberculosis	15
Found on examination not to be suffering from tuberculosis	7
Left the town	19
Two years untraced.....	20

Notification.

Of the 381 cases notified during the year, 275 had pulmonary and 106 non-pulmonary tuberculosis. Of the 205 deaths from tuberculosis, 25—that is, 12 per cent.—had not been notified before death. Of the 180 notified cases who died :—

13	died before the notification was received.
25	,, within one week of notification.
25	,, ,, one week to one month of notification.
30	,, ,, one month to three months of notification.
19	,, ,, three to six months of notification.
23	,, ,, six to twelve months of notification.

These figures indicate further improvement in notification of the disease, but it is obvious that quite a considerable number of cases remain unknown to the Public Health Department until they are dead. Whether this be due to diffidence on the part of the patients in seeking medical advice or to reluctance on the part of their medical attendants in forming a definite diagnosis it is apparent that many patients constituting potential sources of infection remain outside administrative control, and do not avail themselves of such facilities as are provided by the Health Authority.

The following table shows the number of “ new cases ” classified according to sex and age groups.

Age-periods.	New Cases.				Deaths.			
	Pulmonary.		Non-pulmonary.		Pulmonary.		Non-pulmonary.	
	M.	F.	M.	F.	M.	F.	M.	F.
Under 1 year ..	1	3	2	2	..	..	3	1
1—5 years	8	6	13	13	6	1	6	5
5—10 years ..	23	9	17	17	3	2	4	5
10—15 years ..	14	13	12	9	6	5	2	2
15—20 years ..	18	16	4	8	13	9	4	..
20—25 years ..	24	14	2	2	16	11	2	..
25—35 years ..	38	36	7	1	17	21	4	3
35—45 years ..	17	26	1	1	16	15	..	2
45—55 years ..	12	10	..	1	11	5	..	..
55—65 years ..	4	2	..	1	3	2	..	..
Over 65 years ..	..	..	..	..	..	..	..	..
Totals	159	135	58	55	91	71	25	18

The term “ new cases ” includes all *primary* notifications (381 as above) and 26 other cases coming to the knowledge of the Medical Officer of Health otherwise than by notification on Form A or Form B under the Public Health (Tuberculosis) Regulations, 1912.

These 26 cases were made up as follows :—

- (a) one change of address reported under Article 5 of the Public Health (Tuberculosis) Regulations, 1921.
- (b) 25 deaths in cases not previously notified, including transferable deaths in other districts reported in lists received from the Registrar-General.

Included in the summary of new cases for the year are 21 cases of tuberculosis in Arab seamen resident in the Borough, viz. :—20 notified, and 1 death in a non-notified case, as under :—

		Notified cases.	Non-Notified.
Pulmonary	Aged 20—25....	4	..
	25—35..	7	..
	35—45....	3	1
	45—55....	1	..
Non-pulmonary	20—25....	..	..
	25—35....	4	..
	35—45....	1	..

The total number of cases of tuberculosis *notified* during each of the past 10 years is as follows :—

	1915	1916	1917	1918	1919	1920	1921	1922	1923	1924
Pulmonary	437	294	331	227	268	270	283	283	227	275
Non-pulmonary	235	203	173	119	94	90	111	146	122	106

From the above it would appear that there has been an increase in the incidence of pulmonary tuberculosis during the year, but, as would be gathered from my report of last year, I was inclined to regard the previously recorded decrease in numbers as more apparent than real. On the other hand, the influenza-pneumonia epidemic must certainly have had a detrimental effect on many persons predisposed or susceptible to pulmonary tuberculosis.

There has been an appreciable increase (14) in the number of *notifications* of early cases of the disease, or at least of the disease in children under 15 years of age. I do not entirely attribute this to a greater prevalence of the disease in children, or to any greater skill in diagnosis, but rather am inclined to regard it as an immediate result of the Circular issued by the Ministry of Health in 1923 to all medical practitioners, urging the great need for early diagnosis. This matter was referred to in my report for 1923.

Mortality.

During the year there were 205 deaths from tuberculosis, 162 pulmonary and 43 non-pulmonary, a death-rate of 1.62 per thousand of the population as compared with 1.83 for the previous year. There were 10 deaths from tuberculosis among Arab seamen or 5 per cent. of the tuberculosis deaths. Arabs constitute only about 0.4 per cent. of the total population, and it is, therefore, obvious that they suffer from tuberculosis in undue proportion.

The death-rate from tuberculosis during each of the past 10 years is shown below :—

	1915	1916	1917	1918	1919	1920	1921	1922	1923	1924
Pulmonary	1.67	1.73	1.96	1.93	1.30	1.35	1.44	1.29	1.40	1.28
Non-pulmonary	.67	.68	.71	.61	.63	.41	.36	.39	.43	.34

The death-rate from tuberculosis, both of the pulmonary and non-pulmonary form, is this year the lowest ever recorded in the Borough.

Treatment of Tuberculosis.

RESIDENTIAL INSTITUTIONAL TREATMENT.—During the year 247 cases of tuberculosis were known to have been admitted to institutions for treatment. Of these, 171 were treated at the cost of the Town Council as follows :—

At Cleadon Park Sanatorium (144 pulmonary ; 11 non-pulmonary)	155
At the Ingham Infirmary (surgical cases)	11
At other Sanatoria	5

The following table shows the distribution and classification of South Shields patients admitted to institutions during 1924, and includes those treated at the expense of the Corporation :—

....	Ex-Service Men.	Insured.		Non-insured.				Total
		Men.	Women	Men.	Women	Boys.	Girls.	
Approved Sanatoria, etc.—								
Cleadon Park	10	44	18	..	23	25	35	155
Stannington	..	..	..	..	..	3	9	12
Ingham Infirmary	..	1	1	..	5	5	6	18
Royal Victoria Infirmary	1	4	1	..	..	1	1	8
Other Sanatoria	5	3	1	..	..	..	..	9
Poor Law Hospitals	..	*24	1	..	15	3	2	45
Other Hospitals	..	..	..	..	..	..	..	..
Total	16	76	22	..	43	37	53	247

* Includes 10 Arab seamen.

The number of *individual* patients referred to in the above statement is 235, of whom 190 were pulmonary and 45 non-pulmonary cases. Twelve of the patients received treatment in more than one institution during the year.

Included in the cases treated in other sanatoria are 3 ex-service patients, 2 of whom were admitted to Preston Hall, Aylesford, Kent, and 1 to Delamere Training Colony, Frodsham, for Vocational Training. (This man was subsequently transferred to Maltings Farm Sanatorium, Naylands, near Colchester, on the closing down of Frodsham).

CLEADON PARK SANATORIUM.

On February 29th, 1924, the sanatorium was honoured by a visit of Her Highness Princess Marie Louise, who was officially received by the Chairman of the Health Committee and other members of the Council, to whom she graciously expressed her satisfaction with the institution.

The increased accommodation provided at the sanatorium during the course of the previous year enabled a greater number of patients to obtain sanatorium treatment, the total number being increased from 109 to 155.

The average length of stay in the Cleadon Park Sanatorium was 86 days per patient. Of the 156 patients discharged during the year 86 were reported to be very much improved; 42 were improved, and 28 were not improved.

The general result of treatment at the sanatorium of the *adult* patients discharged during the year may be summarised briefly as follows:—

	<i>Males.</i>	<i>Females.</i>	<i>Total.</i>
Much improved	21	25	46
Improved	22	13	35
Not improved	14	6	20
	57	44	101

More than half the men patients admitted to the sanatorium were miners or seamen, while two-thirds of the women were either married or engaged in domestic duties. Two of the male patients died of pneumonia, one while resident in the sanatorium and the other at the Deans Hospital to which he had been transferred, and two of the female patients left against the advice of the medical officer. In this connection it should be remarked that married women, with home ties, not infrequently prove unsatisfactory sanatorium patients. They are inclined to worry unduly over the troubles and difficulties they have left at home, and as this state of mind tends to counteract any benefit that may accrue from sanatorium treatment, it is evident that no good purpose can be served by endeavouring to retain such patients. This is the more regrettable, inasmuch as a married woman who has had a thorough course of sanatorium treatment and discipline can do an enormous amount of good in introducing open-air and hygienic methods into her own home and family, whereby her children may have a better chance of escaping infection.

MUNICIPAL CLINIC.—351 suspected cases and 63 contacts were examined at the clinic. Of these, 169 were found to be suffering from tuberculosis; 120 tuberculosis of the lungs, and 49 tuberculosis of other organs. In 245 cases no evidence of the disease was found.

The following tables summarise the work of the clinic during 1924 :—

Total number of attendances at the clinic	15,343
„ „ examinations „	962
Number of new cases examined.....	414
„ of examinations of ex-service men	215
Number on clinic treatment register on 1-1-24.....	360
„ taken on for treatment during 1924	126
„ discharged	174
„ remaining under treatment on 31-12-24.....	312
„ of home visits paid by the Health Visitors :—	
First visits	373
Subsequent visits.....	2,827
„ of premises disinfected after removal to sanatoria	13
„ „ „ after death of patients..	114

99 school children were sent by the School Medical Officers during the year for diagnosis. Of these 30 were found to be tuberculous.

Of 9 cases referred from the Maternity and Child Welfare Clinic, 3 were tuberculous.

EXAMINATION OF NEW CASES.-

		Found to be tuberculous.		Not tuberculous.	Total.
		Pulm.	Non-pulm.		
Insured :	Men	39	4	38	81
	Women	8	..	9	17
Non-insured :	Men	..	..	..	..
	Women	37	5	40	82
	Boys	20	20	82	122
	Girls	16	20	76	112
Total		120	49	245	414

TREATMENT AT CLINIC.

	Under treatment on 31-12-23.	New cases.	Cases taken off Register.	Cases remaining 31-12-24.
INSURED :				
Pulmonary—				
Men	58	17	41	34
Women	16	1	5	12
Non-Pulmonary—				
Men	1	4	4	1
Women	2	1	1	2
NON-INSURED :				
Pulmonary—				
Men	1	..	..	1
Women	38	16	22	32
Boys	49	20	26	43
Girls	68	21	23	66
Non-pulmonary—				
Men	..	..	..	..
Women	9	4	5	8
Boys	56	20	22	54
Girls	62	22	25	59
Total	360	126	174	312

Three patients were provided with surgical appliances, *e.g.*, splints, surgical boots, etc. 841 surgical dressings were supplied and applied at the clinic.

51 cases were treated by Finsen light apparatus, with a total of 717 exposures.

4 screen examinations and X-ray photographs were made at the clinic.

2 open-air shelters belonging to the clinic were on loan during the year to patients residing in the Borough.

44 patients received extra nourishment under the Council's scheme, and 73 others were recommended to the Poor Law Guardians for such increased food supply by the Tuberculosis Officer.

I append herewith a report from the Clinical Tuberculosis Officer:—

There is an increase in the number of South Shields residents on the Register, and the number of cases notified in 1924 is increased by 32, as compared with 1923.

Only 241 cases were removed from the register, as compared with 499 during 1923; this is mainly due to the fact that patients have to be kept 5 years on the register, as compared to 3 years previously.

It is gratifying to note that the death-rate, both pulmonary and non-pulmonary, is the lowest on record for the last 10 years. The number of deaths from pulmonary tuberculosis is diminished on the male side, while on the female side there is practically no change. On the other hand, there is a marked drop in the number of deaths in females from non-pulmonary tuberculosis.

Of the new cases notified, the largest increase is in the case of children under 10 years of age, and this is in all probability due to the general distress in the district, resulting mainly in under-nourishment.

A number of cases were referred to Harton Hospital, their condition being too "advanced" to benefit by sanatorium treatment. If more effective segregation of helpless, bedfast and advanced cases, disseminating infection, could be obtained, there would be hope of a further reduction in the future in the number of new cases.

MUNICIPAL CLINIC.

Of the 414 new cases examined at the Clinic, 180 were adults, and 234 children of school age or infants.

Of the 180 adults, 126 were sent by their medical attendants, and 54 came of their own accord, these having no private medical attendant.

Of the 234 children, 99 were sent by the School Medical Officers, an increase of 35 over 1923; 62 were sent by their private medical attendants, 64 came of their own accord, having no private medical attendant, and 9 were referred from the Maternity and Child Welfare Clinic.

Of the 180 adult cases, 84 were found to be suffering from pulmonary tuberculosis, and 9 from non-pulmonary tuberculosis. The diagnosis was confirmed in 39 out of these 84 cases by bacteriological demonstration of tubercle bacilli in the sputum.

Of the 234 children examined, 76 were found to be tuberculous.

FINSEN LIGHT.

51 cases were treated by this method, with a total of 717 exposures. This form of treatment has been very valuable for cases of lupus, glands, and peritonitis; unfortunately, the number of cases has had to be limited, as the clinic can only be used when the School Medical Officers can spare the room. The Mountain Sun lamp, allowing of as many as 6 children being exposed at the same time, would be a very valuable addition to the centre, more so as cases of rickets and scurvy could be treated at the same time. This apparatus has been installed in many of the Municipal Clinics, and has proved to be beneficial.

CLEADON PARK SANATORIUM.

It is gratifying to note that on the whole, patients have benefitted immensely by their stay at the institution. Unfortunately, some cases come under notice when the disease is advanced, but were taken into the Sanatorium for a short period to prevent their spreading infection, and to train them in preventive measures.

During the latter part of the year, the new pneumothorax apparatus was made use of.

Artificial pneumothorax was successfully induced in two patients, necessitating 15 re-fills.

Partial collapse was produced in two cases, and no result was obtained in three cases.

Several patients were advised to have this form of treatment applied, but unfortunately they refused. On the other hand, patients when they are very ill, are more willing to submit to this form of treatment; but it is generally found that adhesions prevent the proper collapse of the lung.

The patients who were treated by the artificial pneumothorax method were taken over to Harton Hospital by ambulance, for screening purposes. This has not proved very satisfactory, and it is almost imperative that for the success of such treatment, an X-ray apparatus be installed at Cleadon Park Sanatorium.

Treatment by graduated labour has been abandoned, and great stress has been laid on rest.

As for the children, the results by treatment have been excellent. The cases admitted were mainly of the pre-tubercular type, and these children have returned to their homes in very good general condition. The cases were followed up at the Clinic, and have, as a whole, proved to be very satisfactory.

VENEREAL DISEASES.

There were no changes in the staff of the Venereal Disease Centre during the year. The alterations to the Clinic, which were in progress at the time of writing my last report, are now completed, and the facilities afforded for patients of either sex have greatly improved the efficiency of the centre. The time-table was revised in accordance with the improved accommodation, and men, women, and children now have equal opportunities for attendance.

There are 10 sessions weekly available to persons of either sex, and ample arrangements for intermediate treatment are provided at times to suit practically all classes of workers.

The attendances have been on the whole satisfactory, the average per patient being 18.0 for males and 28.3 for females.

In this connection it should be recollected that the average attendance suffers in seaport towns like South Shields by reason of the large proportion of seamen who attend once or twice, and then move away to some other place.

The following report is submitted by the Venereal Diseases Officer:—

Accommodation.

This now comprises waiting rooms for each sex, with separate approaches and outlets, so that the sexes do not meet. Arrangements have been made so that a minimum of waiting occurs, and as little time is lost to the patients as possible.

The provision of heating arrangements in the waiting rooms and reduction in waiting time has been much appreciated by those attending the clinics.

Scope of Work.

Previous reports have given particulars of the methods of examination and subsequent treatment of patients. The efficiency of the work has been enhanced by the provision of an urethroscope and additional and improved equipment in the laboratory, thus making accurate diagnosis more rapidly obtainable. The work of the laboratory is detailed elsewhere.

Prophylactic Treatment.

Persons having exposed themselves to the risk of infection, and attending the clinic for advice, are given prophylactic treatment and kept under observation. A number of patients attended with symptoms of non-venereal origin, and an analysis of these cases, together with the reasons for which they attended the clinic is given on page 58.

Annual Comparison.

In continuance of the comparison of the numbers of new cases treated year by year, the table produced for the first time last year is re-produced with slight modifications to show the numbers of venereal and non-venereal cases separately.

COMPARATIVE STATEMENT OF NEW CASES TREATED AT THE DEANS HOSPITAL CLINIC DURING THE PAST FIVE YEARS.

	1920.		1921.		1922.		1923.		1924.	
	Residents.	Non-residents.	Residents.	Non-residents.	Residents.	Non-residents.	Residents.	Non-residents.	Residents.	Non-Residents.
Syphilis	131	109	147	82	122	79	86	150	95	98
Soft chancre.....	51	30	7	12	4	9	5	17	16	7
Gonorrhoea	248	162	207	188	190	186	158	219	159	165
Total venereal cases ..	430	301	361	282	316	274	249	386	270	270
Non-venereal cases....	180	50	111	80	97	76	99	47	119	62
Grand Total	961		834		763		781		721	

COMPARATIVE STATEMENT OF ATTENDANCES.

	Resident.	Non-resident.	Total.	Male.	Female.
1920	13,674	1,163	14,837	14,017	820
1921	12,687	5,470	18,157	16,709	1,448
1922	18,123	9,352	27,475	24,074	3,401
1923	16,876	5,425	22,301	19,564	2,737
1924	13,937	5,148	19,085	14,640	4,445

New Cases.

Table (a) summarises the new cases attending during 1924, and Table (b) is an analysis of the attendances.

It will be noted that there is a slight increase in the number of residents infected with venereal disease compared with the number for the previous year. From reports coming to hand from other centres there appears to be a decrease in the number of South Shields patients attending elsewhere, *e.g.*, Newcastle, Sunderland, Tynemouth, etc. It is, therefore, assumed that the cases which would have attended other centres now attend the local centre.

The attendances by female patients reached the highest figure yet attained, and the total number of new cases (female) is the highest recorded. This is, in my opinion, directly due to the new arrangements made at the Centre for women and children.

(a) CASES TREATED AT SOUTH SHIELDS CLINIC DURING 1924.

	NEW CASES.				TOTAL CASES.	
	Male.	Female.	Residents.	Non-residents.	Male.	Female.
Syphilis	156	37	95	98	196	73
Soft chancre	23	..	16	7	29	..
Gonorrhoea	295	29	159	165	442	41
Non-venereal diseases ..	139	42	119	62	144	43
Total	613	108	389	332	811	157

(b) TOTAL ATTENDANCES AT THE CLINIC.

	Males.		Females.		Total.		Average Attendance per patient.	
	M.O.	Others	M.O.	Others	M.O.	Others	Male	Female
Syphilis .	1,584	1,145	896	765	2,480	1,910	13.9	22.8
Soft chancre	121	205	..	..	121	205	11.2	..
Gonorrhoea	2,421	8,459	546	2,052	2,967	10,511	24.6	63.4
Non-venereal diseases	334	371	107	79	441	450	4.9	4.3
Total ..	4,460	10,180	1,549	2,896	6,009	13,076	18.0	28.3

Non-residents affect the attendances considerably. Their average attendance is low compared with that of residents, but that is no doubt largely due to their maritime occupation.

The attendance of non-residents is shown as under :

From 16 Counties in England and Wales	2,396
„ 21 County Boroughs	647
„ Scotland	762
„ Ireland	85
„ 6 Colonies and Dependencies	595
„ 16 foreign countries	663
Total	5,148

Disposal of Cases.

Table (c) shows the disposal of cases during the year. The result is more satisfactory than has been recorded under this heading

in previous reports in every class of case, and has been attained largely by the simple plan of verbally informing patients that unless they comply with the rule asking them to notify the Medical Officer in the event of ceasing to attend or leaving the district they are liable to be written for. In no case has it been found necessary to write. The final tests of cure remain of the same high standard as heretofore, and have in no way been relaxed.

(c) DISPOSAL OF CASES :

	Syphilis.		Soft chancre		Gonorrhoea	
	M.	F.	M.	F.	M.	F.
Ceased attending :						
(a) Before completing first course of treatment	49	8	10	..	127	4
(b) After one or more courses but before completion of treatment	13	6	..	..	..	..
(c) After completion of treatment, but before final tests as to cure	23	15	2	..	111	6
Transferred to other centres ..	33	4	2	..	41	2
Discharged after completion of treatment and observation	11	1	8	..	40	5
Under treatment 31st Dec., 1924	67	39	7	..	123	24

In-Patient Treatment.

23 cases were treated as in-patients during the year—one female and 22 males.

(d) IN-PATIENT TREATMENT :

	No. of In-patients.		No. of In-patient days.	
	So. Shields Residents.	Non-residents.	So. Shields Residents.	Non-residents.
Syphilis	1	8	3	72
Soft chancre	..	4	..	35
Gonorrhoea	1	9	12	94
Non-venereal diseases	..	..	..	..
Total	2	21	15	201

Arsenobenzol Compounds.

1,341 doses of these preparations were administered during the year. 199 doses were applied for and were received by 7 approved practitioners. Several cases were referred to the centre for diagnosis during the year by local doctors. Two doctors attended the centre for instruction.

Pathological Examinations.

The Wassermann tests and gonococcal complement fixation tests were carried out at the College of Medicine, Newcastle-upon-Tyne. 398 specimens were sent from the clinic during the year.

The improved laboratory facilities have made it possible to extend the amount of pathological work performed at the local clinic. The following examinations were made :—

Examination of material for spirochetes	27
" " " gonococci	280
" " " other organisms	29
Cultural tests for gonococci	3
Sachs-Georgi re-actions	5

In this connection I must record with thanks the assistance of Mr. Foster, a voluntary worker whose help has been of much value.

The following table shows the number of specimens from South Shields residents examined at the College of Medicine. The figures include specimens sent by other Clinics and hospitals, and those sent by 14 private practitioners, 9 of whom were South Shields doctors.

Source of Material.	Nature of Examination.		
	Wassermann Re-actions.	Micro- scopical.	Gonococcal Complement Fixation Test.
South Shields V.D. Clinic	354	..	1
Newcastle V.D. Clinic	56	..	..
Sunderland V.D. Clinic	1	..	..
Tynemouth V.D. Clinic	1	..	..
Harton Hospital, South Shields	9	..	..
Ingham Infirmary, So. Shields ..	6	..	..
Newcastle Prison	3	..	..
Private Practitioners (14)	42	8	..
Total	472	8	1

South Shields Cases treated at other Centres.

The following table shows the number of South Shields residents treated at other centres. The total number of new cases was 44, being a decrease of 5 as compared with the previous year.

	Newcastle.	Sunderland.	Tynemouth.	Seamen's Hospital, Greenwich.	Miller General Hospital, Greenwich.	Total.
(a) Number of persons dealt with during the year for the first time, and found to be suffering from :—						
Syphilis	8	2	1	6	1	18
Soft chancre	..	..	..	..	..	..
Gonorrhoea	5	1	3	12	..	21
Non-venereal diseases	5	..	..	..	..	5
(b) Total attendances at out-patient clinic ..	261	22	82	170	2	537
(c) Aggregate number of "In-patient Days" ..	..	..	..	17	..	17
(d) No. of doses of Arsenobenzol compounds given in :—						
(i.) Out-patient clinic	81	12	3	1	..	97
(ii.) In-patient department	..	..	..	3	..	3

Analysis of Non-Venereal Cases attending South Shields V.D. Centre during 1924.

Men.	Women.	Children under 16.	Total.
139	21	21	181

1.—CASES WITH DEFINITE RECENT EXPOSURE TO INFECTION, SEEKING ADVICE AS TO PROTECTION, AND HAVING NO SYMPTOMS AT TIME OF EXAMINATION.

Number attended.			Subsequently developed V.D.					
Men.	Women.	Children under 16.	Men.		Women.		Children under 16.	
			S.	G.	S.	G.	S.	G.
75	1	..	..	1	..	..	..	..

Prophylactic treatment is given at the centre to individuals who have exposed themselves to the risk of infection, and who attend the centre with a request for preventative measures.

It will be seen above that 76 cases attended for that special purpose, and that only one male developed gonorrhoea. There were no signs of disease on the occasion of his first examination but a gonococcal urethritis developed within 48 hours of his first attendance.

Another case of interest was that of four seamen, all of whom had exposed themselves to the same source of infection. Three had gonorrhoea at the time of first examination, and one had no symptom of venereal disease. Further enquiry elicited two facts:

- 1.—That the men who contracted gonorrhoea were drunk at the time, and used no prophylactic measures.
- 2.—That the man who escaped infection was not drunk, and had irrigated himself with permanganate solution shortly after exposure.

The following cases have been classified under diseases, and as some individuals suffered from more than one disease, the total number of diseases does not agree with the total number of individuals.

2.—CASES WITH SYMPTOMS IN GENITO-URINARY ORGANS OF NON- VENEREAL ORIGIN AND SUBSEQUENTLY DIAGNOSED.

Men.	No. of cases.	Women.	No. of cases.	Children under 16.	No. of cases.
Balanitis	10	Vulvitis	1	Vulvo-	
Paraphimosis	3	Vulvitis and		vaginitis ..	1
Herpes genitalis	4	glycosuria	1	Eczema of	
Urethritis (non-gono.)	6	Leucorrhoea	5	scrotum	1
Papillomata	3	Pregnancy ..	2		
Epithelioma glans.	1	Cystocele	1		
Tuberculosis testes. ..	2	Vaginal dis-			
Haematocoele, tunica		charge due			
vaginalis	2	to retained			
Varicocele	5	pessary	1		
Haematuria (? papil-					
loma)	1				
Stricture	1				
Urethral fistula	2				

Whilst many of these cases admitted exposure to the risk of infection, and were given prophylactic treatment, they are not classified under Table 1 as they did not attend primarily for prophylaxis, but only when some symptom developed.

The remainder attended as a result of symptoms without any exposure to risk of infection as far as could be ascertained.

3.—CASES REFERRED TO THE CENTRE AS QUERY SYPHILIS AND DIAGNOSED NON-VENEREAL.

A.—MEN.

Two cases referred to centre because their wives had symptoms of syphilis. They were found to be clinically and serologically negative.

One case referred as Chancre of Lip; Wassermann negative. Diagnosed Epithelioma of Lip.

One case referred as Gumma of Tongue: Wasserman Positive. Diagnosed Epithelioma of Tongue.

B.—WOMEN.

One case discharged cured five years ago from hospital—wanted a further test, which was negative.

Three cases attended because their husbands were alleged to have syphilis. These women were clinically and serologically negative.

C.—CHILDREN UNDER 16.

The non-venereal cases having symptoms of other diseases are included here in Tables 2 and 5.

4.—CASES ATTENDING THE CENTRE AS A RESULT OF ADVERTISEMENTS CALLING THE CENTRE “SKIN DEPARTMENT.”

NO REFERENCE TO VENEREAL DISEASE.

Men.	No. of cases.	Women.	No. of cases.	Children under 16.	No. of cases.
Acne	2	No cases for above reason.		No cases for above reason.	
Scabies	2				
Psoriasis	3				
Furnuculosis ..	2				
Septic sores	1				
Impetigo	1				

There is no reason to doubt the bona-fides of these cases, who came under the impresssion that the Centre was the "Skin Department" of a hospital.

5.—MISCELLANEOUS CASES FOUND TO BE SUFFERING FROM—

Men.	No. of cases.	Women.	No. of cases.	Children under 16.	No. of cases.
Oxyuris vermicularis	1	Scabies	1	Scabies	1
Pediculi	3	Impetigo	1	Impetigo	3
Chronic constipation	1	Pediculi	1	Ringworm	1
Haemorrhoids	1	Tuberculosis	2	Rickets	1
Hernia	2	Menopause . . .	1	Conjunctivitis	1
Pyorrhoea	1	Eczema	1	Blepharitis . . .	2
Mucous colitis	1	Psoriasis	1	Hordeolum	1
		Hysteria	1	Septic hand . . .	1
				Otorrhoea	1

It has been found difficult to give reasons for attending a V.D. Centre in all the above cases. Two male cases were previously discharged syphilis cases, and suffer from syphilophobia. Several of the women attributed their symptoms to association with other women alleged to be suffering from V.D.

The children were either those of parents already attending the Centre, or were referred by the School Medical Officers, Tuberculosis Medical Officer or Maternity and Child Welfare Medical Officer for diagnosis.

MATERNITY AND CHILD WELFARE.

Notification of Births.

The number of births reported to the Health Department during 1924 was 3,047 as under:—

(a) Notified under the Notification of Births Acts:—

by midwives.....	1,652
by doctors	463
by relatives and others.....	114
	2,229

(b) Reported by local Registrars (not previously notified) 818

Total	3047
-------------	------

This total includes 38 live twin births, but is exclusive of 76 still-births (20 notified by doctors, 50 by midwives, and 6 by parents). In addition to the 38 live twin births there was one instance of still-born twins and four cases of multiple birth where one child was born alive and the other dead. On enquiry I am informed by the Superintendent of the local cemeteries that 94 still-born children were buried during the year, so that it is obvious that all such births were not notified to the Health Department.

The still-births notified amounted to 2.5 per cent. of the total registered live births as against 2.8 per cent. in 1923, 3.7 per cent. in 1922, and 3.0 per cent. in 1921.

Infant Mortality.

The number of deaths during 1924 among infants under one year was 313. Of these 128 were of ante-natal origin, *i.e.*, due to causes existing prior to the child's birth. Certain of the other deaths may also have been partly due to ante-natal causes.

The principal causes of death were:—

Ante-Natal.	{ Premature birth	78
	{ Debility	25
	{ Malformation, atelectasis and birth injuries ..	15
	{ Syphilis	10
		128.

Post-Natal.	Bronchitis	43
	Pneumonia	32
	Gastro-intestinal disorders	42
	Convulsions	35
	Influenza	10
	Other causes	23
		—— 185
Infant mortality rate		102
Neo-natal mortality rate (under four weeks)		42
Infant mortality rate in illegitimate infants		170

From the above table it is apparent that practically two-fifths of the infants who died were doomed to early death even before they were born. The cause of the infants' death in these cases was due to some fault or defect in one or other of the parents—generally the mother. None of these children had practically any chance of survival. The other infants who died (post-natal causes) had at least what might be termed a “sporting chance,” but were unfortunate in contracting some illness such as bronchitis or pneumonia. Possibly some of the deaths classified as post-natal may also have been really due to ante-natal causes, but it is difficult in many cases to determine this point, and for the purpose of this report I prefer to confine the ante-natal causes to those, regarding which there can be little or no dispute.

In view of the large proportion of ante-natal deaths which occur every year it is obvious that the Ministry of Health were well advised to initiate schemes for the more thorough study and treatment of the conditions leading to these deaths. These schemes have resulted in the establishment of ante-natal clinics in most of the large towns and centres of population in England. The scheme in South Shields was pushed forward as soon as practicable after the appointment of an Assistant Maternity Medical Officer was made, and eventually the first Ante-natal Clinic was held on Friday evening, 20th June. Thereafter the clinic was held every Friday evening, the number of sessions being 27 and the total number of attendances 139. (See further on page 71 under Centres).

The foregoing table of Infant Mortality shows that, as in so many previous years, the principal cause of loss of infant life is premature birth, and it is hoped that the work of the Ante-natal Clinic will help materially to reduce this cause of infant mortality. In previous years expectant mothers have been encouraged to attend at the Council's Maternity Centres before the birth of their children for advice as to their general health and a considerable number (128 attendances compared with 78 in 1923) took advantage of

these facilities. The new scheme, however, by allocating a special clinic session or sessions for this particular purpose bids fair to be much more advantageous both to the patient and to the medical officer. It is hoped that many of the dangers and risks attending pregnancy and confinement will be thus avoided or at any rate minimised.

The deaths of infants from post-natal causes are to a large extent a reflection of the general health and economic conditions in the town. Thus we find that the chief causes were bronchitis and pneumonia, which are usually the most fatal of infantile diseases. In addition, however, the influenza epidemic was definitely assigned as the cause of death in 10 cases, and was possibly a contributory cause either directly or indirectly in some others.

The comparatively large number of deaths assigned to gastrointestinal diseases is a matter for regret, but is not surprising in view of social conditions. Many mothers display a most lamentable ignorance of how and when to feed their infant, and what kind of food and how much to give it. The art of infant feeding appears to be either unknown to or ignored by many South Shields mothers, judging by the crude and sometimes even barbarous methods which are still in use. The infants who survive such methods must be either fortunate or exceptionally robust, and it is possibly this combination of fortune and strength which may account for the virility of the present generation.

The large number of infant deaths assigned to convulsions as a cause—apart from teething—is very unsatisfactory. More often than not, perhaps, the primary cause is a mystery, not easy to elucidate, but there can be little doubt that many cases of convulsions are due to some definite disease such as whooping cough, bronchitis, influenza, etc., or to improper feeding. Two-thirds of the deaths from convulsions occurred under the age of three months, and it is a rather remarkable fact that more than three-quarters of the total were *male* infants.

It may be noted that although the infant mortality rate is higher (7 per 1,000) than the average for the previous three years it is as much as 24 per thousand below the average for the ten years 1911-20; but, as I pointed out in my report for 1923, that amount of improvement is not nearly good enough, and is far inferior to the improvement effected in many other large towns.

There is every reason to believe, however, that the influenza epidemic, which affected South Shields so severely, tended to increase the infant mortality not only by deaths of infants due to

the disease, but also through illness of the parents and consequent inability to attend to the children. I venture to believe that should South Shields escape a serious epidemic during the ensuing twelve months a marked improvement will occur in the infant mortality rate.

The causes of death and age incidence are given in greater detail in the tables on pages 74 and 75.

There were 179 deaths among male children under one year old, as against 134 among female children; the infant mortality rate in boys being 115 and in girls 88. The excess of deaths amongst male children is noteworthy.

Ward Distribution of Infant Deaths.

The highest infant mortality occurred in Shields and Holborn Wards, while Westoe was also rather bad. In the previous year Harton shared with Shields Ward the dishonour of being the worst district for infant mortality, but this year there has been a fifty per cent. improvement in Harton, and it is one of the best. In 1923 Simonside Ward showed the lowest infant mortality rate, followed by Westoe. During the past year Simonside has again been exceptionally good, and is excelled only by West Park, with the extremely low rate of 40 per thousand.

While, therefore, Harton and West Park have shown very great improvement on the previous year, Westoe and St. Hilda have weighed the balance even more in the adverse direction. (See table 8, page 75).

Deaths of Mothers during Labour and Puerperium.

Sixteen deaths occurred from the following causes:—

Puerperal fever.....	3
Abortion	1
Hyperemesis gravidarum	1
Puerperal haemorrhage	1
Puerperal nephritis	1
Puerperal convulsions.....	8
Puerperal insanity	1

This is equal to a rate of 5.2 deaths of mothers per 1,000 births as compared with 3.2 in the previous year. This increase is entirely owing to deaths notified as due to puerperal convulsions.

PUERPERAL CONVULSIONS (ECLAMPSIA).—The most outstanding feature in the above table is the comparatively large number of deaths from puerperal convulsions (eclampsia). This is a most regrettable circumstance, not only because death from this disease is particularly distressing, but also because it is to a considerable extent preventable. The fault may lie with the patient in not submitting herself to the requisite medical examination prior to the event or it may lie, more rarely it is to be expected, with her medical attendant in not carrying out such examination.

The establishment of the ante-natal clinic ought to do much to prevent such fatalities, for there can now be no excuse on the part of any expectant mother that she could not afford to seek medical advice during the months prior to her confinement. It is to be hoped that the fullest advantage will be taken of the services of the clinic. From Dr. Susan Jamieson, the Medical Officer in charge of the Maternity Clinics, I gather that this shows every promise of being the case, and that the registered practising midwives in the town are co-operating in recommending their clients to attend the clinic.

Inspection of Midwives and Administration of the Midwives Acts.

During 1924, 32 midwives notified their intention to practise in the Borough. This number includes 8 midwives (all trained) who commenced midwifery work in the town for the first time during the year, and 24 other women who had practised here in the previous year. Three midwives left the town, and the name of one midwife residing in a neighbouring area but practising in South Shields was removed from the Roll because of offences against the Central Midwives Board rules, the proceedings having been instituted by the Durham County local supervising authority.

There were thus, at the end of 1924, 28 midwives practising in the Borough (apart from midwives at the local Union Hospital) all of whom were working independently of any association, hospital, or voluntary agency. Only two of these midwives are untrained.

Notwithstanding the decrease in the birth-rate the number of midwives is increasing. The total number of cases attended by midwives during the year was 1,604, *i.e.*, 51 per cent. of the total births; almost the same proportion as in the previous year.

The practices vary much in size. While 6 midwives each had over 100 cases, and 8 had from 40 to 100 cases, 8 midwives had less than 20 cases, and 3 had no cases at all during the year. Had the cases been equally apportioned each midwife would have attended 50 cases.

At the beginning of 1924 two of the local midwives were recognised by the Central Midwives Board as teachers of pupil midwives, but during the year one of the teachers left the town.

The Inspector of Midwives paid 149 visits of inspection to midwives, of which 115 were routine visits, and 34 special visits. The number of interviews at the Health Department was 24.

Two "handywomen" were warned for attending midwifery cases, but the difficulty of proving that they did so "habitually and for gain" debarred further legal action.

Six midwives were temporarily suspended from practice on account of infectious disease. In four cases these suspensions were due to puerperal fever, and in one case to scarlet fever in the midwife's practice. One midwife had, unfortunately, to be suspended twice owing to the occurrence of scarlet fever in her own family.

Several midwives were warned for minor infringements of the Central Midwives Board rules.

Complaints having been received from medical practitioners and patients that occasionally the midwife in charge of a case called in to her assistance in emergency a medical practitioner other than the patient's own doctor, the following letter was sent to each of the midwives practising in the Borough, and a copy to each of the local doctors also :—

DEAR MADAM,

From time to time cases have occurred in this Borough in which the midwife attending has, on emergency, called in to her assistance a medical practitioner other than the patient's doctor. Protests have been received subsequently from the patients concerned or their medical attendants.

I am sending this letter to all midwives practising in South Shields to let them know that this matter has been considered by the Central Midwives Board, and that the Board's opinion is that "any patient has a right to the services of any registered medical practitioner desired by her or by a responsible representative of her family."

Of course, if there is any delay in responding to a call the midwife should, after waiting a reasonable time (according to the circumstances of the case) take steps to seek further medical

assistance. The midwife must also remain with the patient and do her best for her until the emergency is over in accordance with the Central Midwives Board Rule E. 7.

Yours faithfully,

WM. NICOLL,
MEDICAL OFFICER OF HEALTH.

Notifications from Midwives.

The following notifications from midwives were received during 1924, in accordance with the Central Midwives Board Rules :—

Sending for medical help (340 causes of illness) ..	334
Still-birth notifications	37
Deaths of infants	11
Deaths of mothers	2
Artificial feeding	14
Infectious cases	11
Laying out of dead body	5
Intention to practise	32

During the year an alteration in the Rules has made it incumbent upon midwives to notify the occurrence of deaths in their practice even although a doctor may be in attendance on the case. This accounts for the increase in the number of such notifications received from midwives.

The reasons assigned by midwives for calling in medical assistance were in 216 cases concerned with the condition of the mother, and in 124 with the condition of the child. In the case of the mothers the chief causes were :—

Difficult labour and malpresentations	98
Abortion or miscarriage	22
Increased pulse or temperature	13
Perineal rupture	11
Retained placenta	10
“ Haemorrhage ”	8
Placenta praevia	3
Influenza	4
Dangerous varicose veins	4
Eclampsia	3
Other conditions	40

With regard to the infant the chief conditions for which medical help was summoned were :—

Feebleness and prematurity	33
Inflammatory condition of eyes	29
Stillbirths	24
Deformities and malformations.....	12
Convulsions	7
Skin eruptions	4
Other conditions	15

The doctors who were called in to these emergencies rendered their accounts to the local supervising authority in 188 cases compared with 201 in 1923. The fees claimed amounted to £245. The authority decided to endeavour to recover £115 from 92 of these cases, but the amount actually recovered during the year was only £70.

Municipal Infant Welfare Centres.

During the year there was a further slight decline in the number of mothers and infants attending the Centres, but to nothing like the same extent as had occurred in the previous year. The disorganization of the Centres consequent on the non-appointment of a medical officer was felt during the year and even though a new appointment was made in January it was naturally some months before the work of this department could be brought up to normal activity. In addition, the decrease in the number of births during the year has obviously reduced the number of mothers and children who might attend the Centres.

The following is a summary of the attendances at the Town Hall and St. Hilda Centres for the years 1923 and 1924. Usually four clinics a week are held at the Town Hall and one at St. Hilda Schools :—

	Town Hall.		St. Hilda.	
	1923.	1924.	1923.	1924.
No. of mothers on register	1,141	1,097	188	184
No. of infants on register	1,150	1,105	188	184
Attendances of mothers	7,197	6,712	1,161	1,357
Attendances of infants	7,248	6,848	1,158	1,361
Attendances of expectant mothers	66	102	12	26
Average attendance per session—				
Expectant Mothers	0.3	0.5	0.2	0.5
Infants	37	35	23	27

In addition there were 139 attendances at the new Ante-Natal Clinic.

832 infants were treated for minor ailments.

For some time it has been felt that the Town Hall and St. Hilda Welfare Centres do not fully supply the needs of the Borough and that many mothers living in Simonside and Tyne Dock are deterred from attending owing to the long distance they have to travel. On that account the matter of additional centres was raised in Committee and it was decided to open additional infant welfare clinics provided suitable premises could be obtained. A number of halls and other premises were inspected and reported upon and it was decided that the Stevenson Memorial Hall and St. Mary's Church Hall were the most suitable of the premises available. Negotiations were opened with regard to these but at the end of the year no definite arrangements had been arrived at.

Dr. Jamieson reports that the health of the infants seen at the Welfare Centres is, generally speaking, satisfactory, but that the same cannot be said for that of the mothers, many of whom were showing, in various ways, the effects of the long period of industrial unrest.

It is believed that the milk supplied under the Council's scheme to necessitous cases in the last three months of pregnancy, and during the first year of the child's life continues to do a large amount of good.

So far, with the existing staff and accommodation, it has not been found possible to hold special consultations for children between the ages of one and five. The nutrition of such children over twelve months old as are seen at the Clinics is generally poor and rickets is not uncommon. Towards the end of the year several children suffering from rickets were subjected to the Finsen Light treatment, but it is too early to speak of the results of such treatment.

The illnesses and diseases found in the infants attending the Infant Welfare Clinic may be summarised as follows:—

	Town Hall Clinic.	St. Hilda Clinic.
Respiratory diseases	474	76
Digestive disorders—		
Malnutrition	307	45
Diarrhoea	61	5
Rickets	119	2
Syphilis	2	2
Skin diseases	290	39
Eye diseases	10	7
Ear diseases	68	13
Other diseases	293	18
Total	<u>1,624</u>	<u>207</u>

Ante-Natal Clinic.

Reference to the circumstances leading up to the opening of this Clinic is made on page 63. The following are details of the work of the Clinic since 20th June, 1924.

Number on Register, Expectant Mothers	54
Not pregnant.....	13
Total	67

Number of attendances	139
-----------------------------	-----

Subsequent to examination at the Clinic it was reported that 15 of the 54 expectant mothers had given birth to full-time live infants before the end of the year, and that there had been no still-births.

All the women who attended at the Clinic received thorough medical examination, and the following table summarises the number of defects and diseases found :—

Dental caries	34
Anaemia	20
Digestive disorders	20
Respiratory disease.....	10
Varicose veins	22
Total	106

The most noteworthy feature in the above table is the comparatively large number of women suffering from decayed teeth. For some years past the Ministry of Health has advocated that the local authority should provide treatment, not necessarily entirely free, for such cases. Hitherto, however, no such scheme has been adopted in South Shields.

Supply of Milk.

Under the scheme approved by the Ministry of Health the following quantities of milk, free or below cost price, were distributed through the Health Department :—

Fresh Milk	85 gallons.
Dried Milk	18,176 lbs.

The total number of applications for free milk granted during the year was 789, of whom 653 were new cases, and 178 expectant mothers.

In addition to the free milk, 23,645 lbs. of dried milk were sold at prices slightly above cost price. The total quantity of dried milk dealt with at the Health Department was thus nearly 19 tons.

There has been a reduction in the distribution of free milk, compared with the year 1923, of about 6,700 lbs. of dried milk, and about 400 gallons of fresh milk.

Ophthalmia Neonatorum.

During the year 1924, 19 cases of ophthalmia neonatorum were notified under the Infectious Diseases Regulations, compared with 32 in the previous year. The case rate per 1,000 births is equal to 6.2 as compared with 10.2 for the preceding year. This is a satisfactory decrease. 8 cases were notified by midwives only. 10 cases were notified by doctors. (In four instances the doctors had been called in by midwives). 1 case was notified by doctor and midwife.

The following table shows the condition of the eyes with regard to vision at the end of the year :—

Cases.			Vision unimpaired.	Vision impaired.	Total Blindness.	Deaths.	Left the town.
Notified.	Treated.						
	At home.	In hospital					
19	18	1	17	..	..	1	1

The hospital cases are exclusive of three cases treated at out-patient departments. The cause of death in the baby who died was certified as due to convulsions. Two of the 19 cases were "non-residents" of the Borough. The case reported as having left the town refers to one of these non-residents—a baby who was treated in Harton Hospital.

It is satisfactory to note that no impairment of vision has been reported among these ophthalmia cases.

In addition to the cases of ophthalmia neonatorum notified 17 other cases of discharging eyes were reported by midwives in accordance with the Rules of the Board, and were followed up by the Health Visitors. Two of these babies died from broncho-pneumonia and congenital syphilis respectively, and one left the town. In none of the other cases was there any defect in eyesight.

Collosol argentum, is still supplied by the Health Department to midwives on request.

Puerperal Fever.

Of the 5 cases notified in 1924 two died. Four of the patients were attended by midwives. The other was attended by an un-certified woman.

One other death from abortion with septic infection occurred. The case was not notified as puerperal fever.

Home Visiting.

The following table summarises the work of the health visitors in relation to the Council's maternity and child welfare scheme. Visits in connection with tuberculosis, the school medical service, and regarding non-notifiable infectious diseases are referred to in the respective sections of the annual report.

No. of visits paid :	first visits (after notification of birth) ..	3,135
	subsequent visits	8,323
„	children breast fed (at first visit)	3,004
„	„ fed otherwise „	131
„	visits <i>re</i> still births.....	80
„	„ „ infant deaths	295
„	„ „ cases of puerperal fever.....	6
„	„ to expectant mothers: first visits	320
	subsequent visits	86
„	„ <i>re</i> applications for free milk	931
„	„ „ emergency midwifery cases	249
Other visits		70

Work of Voluntary Agencies.

In connection with "Baby Week," lectures and demonstrations were given in the Congregational Hall, Ocean Road, each afternoon and evening from July 7th to 10th. The work of organisation was carried out by the Infant Welfare Society, the Honorary Secretary of which is Miss Blair. The lectures and addresses, which were well attended, were given by Miss Barber, late Head Teacher, Tynemouth Cookery School; Miss Muriel Sinclair, of Tynemouth; representatives of the Maternity and Child Welfare Committee and Town Council, and medical and other members of the Health Department staff.

The subjects dealt with included "Baby Food," "Mothers' Food," "Children's Food," "Parental Responsibility," "Infant Welfare Work," "Common Causes of ill-health in Children," "Child Nature."

A contribution towards the expenses of the Society was made by the Town Council with the approval of the Ministry of Health.

TABLE 7.—DEATHS DURING 1924 OF INFANTS UNDER ONE YEAR
CAUSES AND AGES.

CAUSES OF DEATH.	Under 1 Week.	1-2 Weeks.	2-3 Weeks.	3-4 Weeks.	Total under 4 Weeks.	1-3 Months.	3-6 Months.	6-9 Months.	9-12 Months.	Total Deaths under 1 Year.
All Causes : Certified	79	18	15	12	124	48	56	38	38	304
Uncertified	3	..	1	1	5	..	3	1	..	9
Smallpox	..	..	..	..	..	..	..	..	..	..
Chickenpox	..	..	..	..	..	..	1	..	..	1
Measles	..	..	..	..	..	..	..	..	..	..
Scarlet fever	..	..	..	..	..	..	..	..	..	..
Whooping cough	..	..	..	..	..	1	..	1	..	2
Diphtheria and croup	..	..	..	..	..	..	..	..	1	1
Erysipelas	..	..	..	..	..	..	1	..	..	1
Tuberculous meningitis	..	..	..	..	..	1	..	..	..	1
Abdominal tuberculosis	..	..	..	..	..	..	1	..	..	1
Other tuberculous diseases	..	..	..	..	..	..	1	1	..	2
Meningitis (<i>not tuberculous</i>) ..	..	..	..	..	..	..	1	3	..	4
Convulsions	8	..	1	5	14	11	6	2	2	35
Laryngitis	..	..	..	..	..	..	..	..	1	1
Bronchitis	..	..	..	..	..	12	14	10	7	43
Pneumonia (all forms)	..	..	1	..	1	3	10	8	10	32
Diarrhoea	..	1	..	..	1	1	7	6	2	17
Enteritis	..	..	..	1	1	5	3	4	6	19
Gastritis	..	..	1	..	1	1	1	2	1	6
Syphilis	..	2	..	1	3	3	3	..	1	10
Rickets	..	..	..	..	..	..	..	..	..	..
Suffocation, overlying	..	..	..	..	..	1	..	..	..	1
Injury at birth	..	1	..	..	1	1	..	..	..	2
Atelectasis	4	..	..	..	4	..	..	..	..	4
Congenital malformations	5	..	1	..	6	..	3	..	..	9
Premature birth	48	11	11	1	71	7	..	..	..	78
Atrophy, debility & marasmus ..	16	3	1	3	23	1	1	..	..	25
Other causes	1	..	..	2	3	..	6	2	7	18
Total	82	18	16	13	129	48	59	39	38	313

Net Births in the Year :—

Legitimate 2,977

Illegitimate 94

Net Deaths in the Year :—

Legitimate Infants 297

Illegitimate Infants .. 16

TABLE 8.—DEATHS DURING 1924 OF INFANTS UNDER ONE YEAR :
CAUSES AND WARD DISTRIBUTION.

CAUSES OF DEATH.	WARDS.															Total.
	Shields	Beacon	St. Hilda.	Hadrian	Holborn	Laygate.	Victoria.	Bents	Kekendyke.	Westoe	Deans	Tyne Dock.	Simonside.	West Park.	Harton.	
ALL CAUSES—																
Certified.....	37	20	20	16	31	30	25	9	28	21	27	19	8	6	7	304
Uncertified.	1	...	...	1	1	1	2	1	1	...	...	...	1	...	...	9
Smallpox	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1
Chickenpox	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Measles	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Scarlet fever....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2
Whooping cough	...	1	...	...	...	1	...	...	...	...	...	...	...	...	...	1
Diphtheria and croup	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	1
Erysipelas	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	1
Tuberculous meningitis	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	1
Abdominal tuberculosis	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1
Other tuberculous diseases.....	...	...	...	...	1	...	1	...	...	...	...	...	...	...	...	2
Meningitis (<i>not tuberculous</i>)	...	...	...	1	...	2	...	...	1	...	...	...	...	...	...	4
Convulsions	2	...	...	2	5	1	4	...	8	4	5	1	3	...	...	35
Laryngitis	1	...	...	3	2	...	3	...	1	...	5	5	2	...	...	1
Bronchitis	7	2	6	1	3	6	1	1	3	4	1	3	...	1	...	43
Pneumonia (all forms)	5	3	3	1	3	3	1	1	3	...	1	3	...	...	1	32
Diarrhoea	2	1	...	2	2	5	1	1	1	...	1	1	...	...	...	17
Enteritis.....	2	1	3	...	2	3	2	2	2	...	1	1	...	...	...	19
Gastritis	1	...	...	...	...	1	3	...	...	...	...	...	...	1	...	6
Syphilis	4	...	...	1	2	2	...	...	...	...	...	...	...	1	...	10
Rickets	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Suffocation, overlying	...	...	...	...	1	...	...	...	...	1	...	...	...	...	1	1
Injury at birth.....	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	2
Atelectasis.....	...	...	...	...	...	...	...	...	1	2	...	...	...	...	...	4
Congenital malformations	...	1	1	1	...	...	1	...	2	1	1	...	...	...	1	9
Premature birth.....	10	9	6	4	8	2	4	6	5	7	8	4	1	...	4	78
Atrophy, debility and marasmus	1	1	...	1	5	3	4	...	2	1	3	...	1	3	...	25
Other causes.....	2	...	1	...	1	2	3	...	2	...	1	4	2	...	...	18
Total Deaths under one year ...	38	20	20	17	32	31	27	10	29	21	27	19	9	6	7	313
Number of Births*	249	198	145	186	218	228	259	138	258	150	283	270	187	150	111	3047
Infant Mortality Rate*	153	101	138	91	147	136	104	72	112	140	95	70	48	40	63	102
Total Deaths at all ages †	164	113	107	143	137	156	154	101	149	102	148	121	90	98	29	1831

* The births dealt with in this table are (a) 2229 live births notified under the Notification of Births Acts, and (b) 818 registered and not previously notified; including 17 births in Harton Institution among "non-residents" of the Borough. Elsewhere in this report the Registrar-General's figures of births registered during the calendar year have been used for the calculation of birth-rates.

† Includes 19 deaths in Harton Institution among persons with no fixed abode.

SCHOOL MEDICAL SERVICE.

The staff of the school medical service was completed early in the year, after the disorganisation due to various causes that occurred in 1923.

Dr. Nisbet took over the duties of whole-time assistant school medical officer, and Dr. Susan Jamieson those of part-time assistant school medical officer on January 7th, 1924. The staff, therefore, except for changes amongst the nurses, was complete for the whole year, the advantages of which are obvious from the following report on the work which has been submitted by Dr. Nisbet.

The outstanding features in the table showing the results of medical inspections during the year (Table 10 (A), page 90) are the marked increase in the incidence amongst school children of heart diseases and lung affections, other than tuberculosis. These are in all probability the after-math of the influenza epidemic of the early part of the year.

The great increase in the number of children found to have enlarged tonsils and adenoids must be ascribed either to more thorough methods of examination or to a more stringent standard. In this matter the standards adopted by various school medical inspectors vary so greatly that no reliable comparison can be made between the findings of two different inspectors.

The increase in the number of cases of scabies is also possibly due to more careful medical inspection, though it may in part be the result of unsatisfactory home attention and neglect of opportune treatment. Nervous affections also appear to have been greatly on the increase.

On the other hand, while the number of suspected tubercular cases amongst school children has increased, the number of cases definitely diagnosed as suffering from the disease is considerably diminished.

(A.) THE SCHOOL MEDICAL SERVICE IN RELATION TO PUBLIC ELEMENTARY SCHOOLS.

General Hygienic Conditions of Schools :

Special reports were made to the principal school medical officer on the sanitary condition of several school premises. Although most were fairly satisfactory, some left a good deal to be desired.

Some of the school buildings are very old, sombre, and not too well illuminated. In other schools considerable difficulty is experienced in maintaining a sufficiently high temperature for comfort, and at the same time providing necessary ventilation.

Medical Inspection :

Number of children on the registers at the end of 1924	21,619
Average attendance for the year (89.8 per cent.) ..	19,213
Number of elementary schools	26
Number of departments.....	57

(1) ROUTINE MEDICAL INSPECTIONS.

No. of Code Group Inspections—

These inspections fall into three groups :

(a) Entrants (children just admitted, ages about 5—6)	2,297
(b) Intermediates (children mid-way in their school life, aged 8—9)	1,919
(c) Leavers (children approaching the end of their school life, ages 12—13)	2,596

The total number of inspections in these code groups
was 6,812

All these children were inspected at their respective schools by the assistant school medical officers. Prior to the doctor's visit to the schools, the children are weighed and measured by one of the school nurses, who also inspects them with regard to cleanliness and tests their powers of distant vision, except in the case of entrants.

The head teacher then acquaints the parents of each child of the approximate time at which their child will be examined, and requests their presence at that time.

In this connection it is to be noted that 68 per cent. of parents were present at these routine examinations. It is a matter of satisfaction that, during the past year, only one objection was lodged.

For routine medical inspections to be of fullest value, the co-operation of parents and head teachers is necessary. During the past year the head teachers have given the medical staff much useful help.

The number of children examined by routine medical inspection during the year was 1,818 more than in the previous year.

(2) OTHER INSPECTIONS—

No. of Special Inspections	4,275
No. of Re-inspections	6,694
	10,969

Under special inspections are included such children as have been referred to the clinic by private doctors, nurses, head teachers or attendance officers. When these special cases are seen on any occasion subsequent to the first, the visit is classed as a re-inspection.

The number of these cases is very large, and, as has been pointed out in previous reports, the size of the clinic premises is inadequate, and the arrangement of the rooms is awkward.

On several occasions cases of acute infectious disease have been found in the clinic. These had of necessity to await their turn like other cases in the crowded waiting-room, and thus were an element of danger to other children in attendance at the same time.

Everything is done to refer suitable cases to their family doctor, but unfortunately many of the cases are too poor to pay for private services, and the school clinic is invaluable to them. Many parents have no definite idea where to get specialist advice, and the information they can get at the clinic, on enquiry, is much appreciated.

Findings of Medical Inspection :

UNCLEANLINESS.—Very few cases of personal uncleanliness, considering the large number of cases inspected, were found. Any cases found are followed up by the school nurses who visit the home, advise the parent and re-inspect to see that the condition is improved. This method of procedure is generally successful.

TONSILS AND ADENOIDS.—Enlarged tonsils and adenoids are most commonly found in children between the ages of 6 and 12. The evil effects of these conditions fall into two main groups :

- (1) Local effects.
- (2) Effects on the general health.

From the local situation arises obstruction to nasal breathing, so that the patient breathes through the mouth, and develops a characteristic type of face, the features of which are :—an open mouth ; pinched nose, dull and stupid look. The roof of the mouth becomes high and arched, and the teeth are badly arranged. The child snores at night. In addition deformities of the chest result.

Further, the tube leading from the throat to the ear becomes blocked, and the ear-drum becomes indrawn and the child begins to be troubled with deafness. If this tube is not speedily cleared, then the probability is that the deafness will be permanent.

The main effects on the general health are that the growth as a whole is stunted; the child is liable to recurrent attacks of bronchitis, to asthma, enuresis, and fits. In addition the child is generally mentally retarded.

The abnormal adenoid tissue may provide a site of entry for organisms of disease, for example, those which set up an ear discharge.

The numbers of children observed to be suffering from these defects were:

Enlarged tonsils only	609
Adenoids only	132
Enlarged tonsils and adenoids	439

TUBERCULOSIS.—Close relations are maintained between the school medical service and the tuberculosis clinic. During the year 99 school children suffering mainly from diseases of the chest, were referred to the tuberculosis medical officer for his opinion. 30 of these were found to be definite cases of tuberculosis, and 29 were marked as suspicious.

SKIN DISEASES.—Cases of impetigo contagiosa and septic sores form the great majority of cases. The number of ringworm cases and cases of scabies showed some increase on the previous year.

EXTERNAL EYE DISEASE.—The majority of these cases were blepharitis, *i.e.*, inflammation of the edges of the lids.

There were, in addition, many cases of conjunctivitis, *i.e.*, inflammation of the inner surfaces of the lids and the white outer covering of the eyeball.

DEFECTIVE VISION.—607 cases of defective vision and 44 cases of squint were referred for treatment.

The new Myopia School was opened on the 28th April, 1924, with Mrs. Sinclair as teacher. The school started with 12 scholars, and during the year there have been 12 further admissions. The premises consist of a single room in the dining block of Stanhope Road School.

Most of these children have a very high degree of myopia, and they are all at different ages, so the work of the teacher who has to deal with them all at one time must obviously be difficult. Further, these children need constant supervision, for instance, as regards the position of the head while drawing. It is my opinion that if the number of children attending this school increases to any great extent another teacher will be required, in order that the children may benefit to the full extent under the scheme.

The aim of the school is a scientific and humane effort to make stationary this condition of myopia in childhood, which, if not looked after is apt to increase, and may, in extreme cases, end in total blindness.

The assistant medical officers keep in close touch with the school, and visit it frequently. In addition to these visits the scholars have a routine medical inspection once a year, and have their eyes tested every six months. The scholars were inspected in March, 1924, before admission, and again in September, and although it is rather early to draw conclusions, most of the children appeared to show satisfactory progress at the second examination.

DENTAL DEFECTS :

No. of children inspected by the school dental surgeons at routine dental inspections.....	3,264
No. of children found requiring treatment	1,784

In addition, at the routine medical inspections, 4,071 out of 6,812 children (60 per cent.) were found to have dental defects.

The Local Education Authority decided, towards the close of the year to appoint a whole-time dental surgeon in place of the two part-time dentists.

CRIPPLING DEFECTS.—These fall into four main groups arranged in order of frequency :—

- (1) Due to tuberculosis.
- (2) „ rickets and accidents.
- (3) „ infantile paralysis.
- (4) „ congenital malformations.

OTHER DISEASES.—General debility, including mal-nutrition, bronchitis and anaemia are prominent in the return of defects. The bad general conditions resulting from unemployment, overcrowding and lack of houses in the borough greatly favour the production of these defects.

PREVIOUS INFECTIOUS FEVERS.—Information obtained at routine inspections showed that :

45.0	per cent.	of the children	had previously	had measles.
21.7	„	„	„	„ whooping cough
11.6	„	„	„	„ chickenpox
5.9	„	„	„	„ scarlet fever
1.1	„	„	„	„ diphtheria.

VACCINATION.—The percentage of children at routine inspections found to be unvaccinated was :—

In 1920.....	27	per cent.
„ 1921.....	34	„
„ 1922.....	40	„
„ 1923.....	44	„
„ 1924.....	45	„

Whatever the cause, it will be realised that a largely unvaccinated population is rapidly growing up, a circumstance which may be of serious import in the event of an outbreak of smallpox in the borough.

INFECTIOUS DISEASES.—The number of cases of acute notifiable infectious diseases in scholars or children of school age in the borough in 1924 was as follows :

Scarlet fever.....	485
Diphtheria	26
Influenzal pneumonia.....	9
Acute primary pneumonia.....	54
Enteric fever	5
Erysipelas	2
Poliomyelitis	2

In February and March the school attendance was greatly reduced as a result of the epidemic of influenza. Nearly every department was seriously affected, and in some cases the attendance fell to almost 50 per cent. In addition, many of the teachers were affected, and at times this resulted in a serious depletion of staff.

In the later months of the year, scarlet fever was very prevalent among school children.

Measles also was prevalent in the infant departments towards the end of the year, one infant department suffering very badly. These outbreaks necessitated special visits to the schools concerned, but in no case was school closure found advisable.

Medical Treatment :

The number of individual children who attended the general clinic was 3,622, the total number of attendances being 16,050. 2,871 children received treatment at the clinic.

Further details of the treatment given will be found in Table 12 (page 95), and in the paragraph below under " Other Defects."

MINOR AILMENTS.—Under this heading are included cuts, bruises, sprains, sores, warts, etc. Treatment consisted of advice and simple dressings.

TONSILS AND ADENOIDS.—The number of children who received operative treatment at the Wesley Street clinic was 135. In addition 17 children received operative treatment at home or in hospital.

The main indications which led the school medical officers to advise operative treatment were :

- (1) Deafness.
- (2) Ear discharge.
- (3) Periodic attacks of tonsillitis.
- (4) Recurrent attacks of bronchitis.

The results of operative treatment have been, in nearly every case, very good ; in some, remarkable.

Many other less pronounced cases have been treated by breathing exercises and gargles, and the results have been good.

TUBERCULOSIS.—During the year 27 school children have been treated by means of the Finsen Light. Five cases treated were tuberculous conditions of bones and joints. Of these, 4 improved and 1 did not continue the treatment. 13 cases treated were tuberculous glands. Of these 2 were apparently cured ; 6 improved ; 2 did not improve and were sent to Stanington Sanatorium ; 3 did not keep up treatment. Two cases treated were cases of abdominal tuberculosis. One has since died and the other is reported to have no further symptoms. Seven cases of lupus were treated, and all showed improvement.

SKIN DISEASES.—The numbers of the main skin conditions treated at the clinic were as follows :—

Ringworm of the scalp	123
" " body	105
Scabies	65
Impetigo	590
Other skin conditions	664

There are two methods generally adopted for the treatment of ringworm of the scalp, the one by means of X-rays and the other by means of local applications of ointments and lotions. The former method is by far the best and surest, but has several drawbacks. Firstly, it is not considered safe to apply X-rays to a scalp to which local applications have already been made, and, as it happens, many of the cases which come have already been trying family remedies. Then, prior to this treatment, it is necessary to point out to the parent that the child will be bald for a time, and that there is a risk of the hair not growing again. We make it a custom to have the parents' signature agreeing to treatment in these cases, and as is to be expected, some parents object to this form of treatment. During the year several cases were given this treatment, and were well in a comparatively short time.

The main method of treatment, however, is by means of local applications. Our routine is painting twice a week with tincture of iodine and inunction on the other days with a mercurial ointment containing sulphur. The success of the method varies. In some the heads clear up quickly, but in others the disease lingers for a long time. The hair, during treatment, is kept as short as possible.

Ringworm of the body yields much more readily to local applications such as the above, and seldom gives much trouble.

During the year scabies has been troublesome. The difficulty is in carrying out the treatment. It is easy to suggest frequent changes of clothing and bedding, but the cases who generally contract scabies are usually the people for whom it is most difficult to get these things. The treatment for scabies is sulphur ointment along with routine advice. We also use beta-naphthol in a zinc paste in some cases where there is any danger of sulphur irritation.

In addition to the above, ten cases of molluscum contagiosum were treated. All cases treated were in attendance at the public baths. No definite source of infection could be found, but the Baths Manager was informed, and affected children were prohibited from bathing in the public pond.

EAR DISEASES.—Many ear examinations were made and appropriate treatment prescribed.

The great majority of these were cases of discharging ears. 123 were treated. Many of these were secondary to adenoids. In addition 44 cases were treated for impacted wax.

DENTAL DEFECTS.—732 children were treated by the School Dental Surgeons. The particulars of the treatment given are as follows :—

1,362 extractions.

434 fillings.

54 other operations.

35 general anaesthetics were administered by Dr. Jamieson.

VISION.—438 cases were examined by refraction at the clinic and 12 by private practitioners. Spectacles were prescribed for 412 cases at the clinic, and the glasses were obtained by 323 children through the Education Authority's scheme; 152 were supplied free, and the remainder at cost price or part price in accordance with the scale of income adopted with the approval of the Board. 12 children secured spectacles privately.

The following table gives the incidence of the various errors of refraction found :—

Hypermetropia.....	28.2	per cent.
Myopia	11.7	„
Simple hypermetropic astigmatism	9.3	„
Simple myopic astigmatism	1.5	„
Compound hypermetropic astigmatism	19.7	„
Compound myopic astigmatism	9.7	„
Mixed astigmatism	15.8	„
Unclassified	4.1	„

OTHER DEFECTS.—Treatment of defects other than those referred to in the preceding paragraphs is summarised in the following statement :—

Disease or Defect.	No. of defects treated.		
	Under the Authority's Scheme.	Other-wise.	Total.
Anaemia and debility	342	1	343
Tuberculosis :			
Pulmonary : Definite	33	1	34
Suspected	75	..	75
Non-pulmonary	28	..	28
Lung disease (not tuberculous)	356	2	358
Enlarged glands	156	2	158
Acute infectious diseases	16	6	22
Heart diseases	40	11	51
Diseases of nervous system	23	3	26
Gastritis	16	..	16
Threadworms	34	..	34
Rheumatism	10	5	15
Enuresis	7	..	7
Influenza	4	5	9
Other diseases and defects (including nephritis, appendicular colic, pneumonia, phimosis, etc.).....	17	14	31
	1,157	50	1,207

TREATMENT OF UNCLEANLINESS.—The children at each school should have been submitted to two cleanliness surveys in the year. The first survey was completed, but the second was not finished owing to shortage and changes in the nursing staff, and to the difficulty on occasions of fixing times suitable to both head teachers and nurses. This work of the nurses is very important in some areas, and is attended by good results.

The number of children examined in this way is shown in table 12, Group V. (page 98). It will be observed that approximately 10 per cent. were dirty or affected with vermin or nits. These children were re-inspected at short intervals, and in 8 cases it was necessary to serve notice on the parents under Section 87 of the Education Act, 1921, after informal warnings had been given. No children were compulsorily cleansed, but two cases were referred to the school clinic by the Inspector of the National Society for the Prevention of Cruelty to Children.

OPEN-AIR EDUCATION.—At the end of the year plans of an open-air school, capable of accommodating about 100 children, were submitted to the Board of Education, and there were prospects of the school being started about the Easter Vacation of 1925.

The school is situated on the Cleadon Park Estate in a very healthy position. It is expected that this school will prove of very great value and supply a long felt want.

PHYSICAL TRAINING.—There is no system of co-ordinating the school medical service with physical training, but when necessary the usual school routine is modified or excused on the recommendation of the school medical officers.

PROVISION OF MEALS.—177 children were provided with free meals during the year at a cost of £498 15s. 11d. for the 21,226 meals so provided. There are two free meal centres in the town, and one meal—dinner—is given.

SCHOOL BATHS.—One school is provided with baths. During 1924 school children made 38,930 attendances (boys, 30,653 ; girls, 8,277) at the Derby Street Baths, under the Education Authority's instructors. The baths were open throughout the year.

CO-OPERATION OF PARENTS.—In most cases the parents show a keen interest in the medical inspections, and desire to help in any way possible. 68 per cent. of the parents were present at the examinations, and only one parent made objection. The following is an account of the amounts contributed at the various clinics :—

	£	s.	d.
Eye Clinic.....	35	8	6
Surgical Clinic	22	15	6
Dental Clinic	25	19	10
General Clinic	24	11	5
TOTAL	£108	15	3

In 1923 the total amount contributed was only £57 10s. 5d.

CO-OPERATION OF TEACHERS.—As has been previously stated the teachers afford great help to the school doctors on their visits, and it is with pleasure that the medical staff record their thanks.

SCHOOL ATTENDANCE OFFICERS.—Mr. Willits and his assistants have also given valuable help, more especially with regard to children classed as “exceptional.”

Co-operation of Voluntary Bodies.

NATIONAL SOCIETY FOR THE PREVENTION OF CRUELTY TO CHILDREN.—The Inspector has, on the rare occasions on which it had been found necessary to call him in, rendered the department valuable service.

SHOELESS CHILDREN FUND.—The Chief Constable, Mr. William Scott, who is Honorary Secretary of this fund, informs me that 1,506 children were supplied with boots and stockings during the year. This is an increase of nearly 500 on the previous year.

POOR CHILDREN'S HOLIDAY ASSOCIATION.—About 40 children were given a holiday in the country under the auspices of this Association, and several other scholars were admitted to the Brough Holiday Home in South Shields. The improvement in the children's health, dating from the holiday, was in most cases well marked.

(B). BLIND, DEAF AND DEFECTIVE CHILDREN.

The number of exceptional children is given in Table 11 (page 93) classified in accordance with the terms of the Education Act and the Board's circular on the subject. As regards mentally defective children, the figures are not comparable with those of other districts, as there are many scholars reported in returns from head teachers who have not yet been examined by approved certifying officers.

(C.) SECONDARY SCHOOLS.

A complete routine inspection was carried out at the higher schools for the first time for two years. The examinations in these schools is somewhat more searching than at the others, and it is pleasing to note that a high standard of physical fitness was found.

(D.) EMPLOYMENT OF CHILDREN AND YOUNG PERSONS.

Five licences were granted during the year under the Employment of Children in Entertainments Rules, 1920.

(E.) MISCELLANEOUS.

Examination of Pupil Teachers and Scholarship Candidates.

67 pupil teachers and bursar candidates were medically examined during the year; 2 were found to have defective vision. 39 scholarship candidates were also inspected; 1 had defective vision.

Visits of School Nurses.

The nurses paid 827 visits to schools in connection with routine medical inspections, special examinations and cleanliness surveys.

They also made 1,464 visits to homes in "following-up" and advising medical treatment, in addition to the visits made regarding cases of measles, whooping cough, etc.

Deaths of School Children of School Age.

The following table shows the causes of death during 1924 of children aged 5—14 years.

Cause of Death.	Boys.		Girls.		Total.
	5-9 years.	10-14 years.	5-9 years.	10-14 years.	
Measles	1	..	1	..	2
Scarlet fever	1	..	1	..	2
Whooping cough	1	..	..	..	1
Diphtheria	..	..	3	..	3
Influenza	3	..	8	2	13
Erysipelas	..	..	..	1	1
Pulmonary tuberculosis	3	6	2	5	16
Other tuberculosis	4	2	5	2	13
Rheumatic fever	1	2	1	..	4
Diabetes	..	..	1	..	1
Leucocythaemia	1	..	..	..	1
Meningitis	..	2	2	..	4
Infantile paralysis	1	..	..	..	1
Epilepsy	..	1	..	..	1
Convulsions	..	2	1	..	3
Mastoid disease	..	1	..	1	2
Valvular disease of heart	1	..	..	..	1
Other heart diseases	..	1	1	..	2
Laryngeal paralysis	..	..	1	..	1
Bronchitis	1	..	3	1	5
Pneumonia	3	3	5	..	11
Tonsillitis	..	1	1	..	2
Gastritis	1	..	..	..	1
Gastro-enteritis	..	..	1	..	1
Appendicitis	1	2	2	..	5
Nephritis	..	..	1	..	1
Phlegmon	..	..	..	1	1
Diseases of bones	2	..	..	..	2
Congenital hydrocephalus	..	1	..	..	1
Injury by fall	..	..	..	1	1
Total	25	24	40	14	103

This number is one less than that for 1923. A decrease in the number of deaths from tuberculosis, diphtheria and measles was equalised by the increase in deaths from influenza, bronchitis and pneumonia. Respiratory diseases and tuberculosis were the chief causes of death, accounting for more than one-half of the total.

ELEMENTARY AND HIGHER SCHOOLS.

TABLE 9.—RETURN OF MEDICAL INSPECTIONS DURING
THE YEAR ENDED 31st DECEMBER, 1924.

A.—ROUTINE MEDICAL INSPECTIONS.

	<i>Elementary.</i>	<i>Higher.</i>
Number of Code Group Inspections—		
Entrants	2,297	} 626
Intermediates	1,919	
Leavers	2,596	
Total	6,812	626
Number of other Routine Inspections	..	..

B.—OTHER INSPECTIONS.

Number of Special Inspections.....	4,275	4
Number of Re-inspections.....	6,694	45
Total	10,969	49

ELEMENTARY AND HIGHER SCHOOLS.

TABLE 10.—(A.) RETURN OF DEFECTS FOUND BY MEDICAL INSPECTION IN THE YEAR ENDED 31st DECEMBER, 1924.

Defect or Disease.		Routine Inspections.		Specials.	
		No. of defects.		No. of defects.	
		Re- quiring treat- ment.	Requiring to be kept under ob- servation but not requiring treatment	Re- quiring treat- ment.	Requiring to be kept under ob- servation but not requiring treatment
		El. Hr.	El. Hr.	El. Hr.	El. Hr.
Skin	Malnutrition .....	.. ..	.. ..	10 ..	.. ..
	Uncleanliness	8 ..	183 ..	53 ..	.. ..
	Ringworm—				
	Scalp	12 ..	.. ..	123 ..	.. ..
	Body	6 ..	.. ..	105 ..	.. ..
	Scabies	5 ..	.. ..	65 ..	.. ..
	Impetigo	61 2	.. ..	591 ..	.. ..
Eye	Other diseases (non- tuberculous) ..	24 ..	68 6	658 ..	.. ..
	Blepharitis	16 ..	109 1	118 ..	.. ..
	Conjunctivitis	5 ..	5 1	86 ..	.. ..
	Keratitis .....	.. ..	.. ..	1 ..	.. ..
	Corneal opacities ..	.. ..	.. ..	1 ..	.. ..
	Defective vision (ex- cluding squint) ..	449 45	268 69	158 1	.. ..
	Squint	13 2	140 2	31 ..	.. ..
Ear	Other conditions ..	6 ..	14 ..	65 ..	.. ..
	Defective hearing ..	24 4	674 27	66 ..	.. ..
	Otitis media	16 ..	32 1	126 ..	.. ..
Nose & Throat	Other ear diseases ..	11 2	19 ..	46 ..	.. ..
	Enlarged tonsils only	135 1	384 6	89 ..	1 ..
	Adenoids only	56 1	57 ..	19 ..	.. ..
	Enlarged tonsils and adenoids	353 4	.. ..	84 ..	2 ..
Teeth.	Other conditions ..	21 ..	69 1	109 2	.. ..
	Enlarged cervical glands (non- tuberculous) ..	3 ..	1,250 38	160 ..	.. ..
	Defective speech .....	.. ..	147 5	3 ..	.. ..
Dental diseases		363 5	3,708 275	360 1	.. ..

TABLE 10 (A.)—*Continued.*

Defect or Disease.		Routine Inspections.		Specials.	
		No. of defects.		No. of defects.	
		Re- quiring treat- ment.	Requiring to be kept under ob- servation but not requiring treatment	Re- quiring treat- ment.	Requiring to be kept under ob- servation but not requiring treatment
		El. Hr.	El. Hr.	El. Hr.	El. Hr.
Heart and Circu- lation.	Heart disease—				
	Organic	1 ..	5 ..	3 ..	.. ..
	Functional	4 ..	134 24	55 ..	.. ..
	Anaemia	54 1	368 44	367 ..	.. ..
Lungs	Bronchitis	29 ..	443 15	233 ..	13 ..
	Other non-tuber- culous diseases ..	1 ..	.. ..	94 ..	43 ..
	Pulmonary—				
	Definite	1 ..	8 ..	33 ..	1 ..
	Suspected	25 ..	10 ..	41 ..	30 ..
	Non-pulmonary—				
	Glands.....	2 ..	3 ..	12 ..	4 ..
Tuber- culosis.	Spine .....	.. ..	1 ..	1 ..	.. ..
	Hip .....	.. ..	.. ..	1 ..	3 ..
	Other bones and joints .....	.. ..	5 ..	2 ..	.. ..
	Skin .....	.. ..	2 ..	3 ..	.. ..
	Other forms	1 ..	5 ..	1 ..	1 ..
Nervous System	Epilepsy .....	.. ..	4 ..	3 ..	.. ..
	Chorea.....	6 ..	.. 1	20 ..	.. ..
	Other conditions ..	1 ..	38 39	10 ..	.. ..
Deform- ities.	Rickets .....	.. ..	35 1	2 ..	.. ..
	Spinal curvature ..	1 ..	8 7	1 ..	.. ..
	Other forms	3 ..	68 10	14 ..	.. ..
Other defects and diseases....		46 ..	105 32	498 ..	.. ..

**(B.) NUMBER OF INDIVIDUAL CHILDREN FOUND AT
ROUTINE MEDICAL INSPECTIONS TO REQUIRE TREAT-
MENT (excluding uncleanness and dental diseases).**

GROUP.	Number of Children.				Percentage of children found to require treatment.	
	Inspected.		Found to require treatment.			
	El.	Hr.	El.	Hr.	El.	Hr.
Code Groups:						
Entrants	2,297	..	338	..	14.7	..
Intermediates	1,919	..	396	..	20.6	..
Leavers	2,596	..	474	..	18.3	..
Total : (Code groups)	6,812	626	1,208	45	17.7	7.2
Other routine inspections	..	..	..	..	..	..

El.—Elementary.

Hr.—Higher.

**TABLE 11.—RETURN OF ALL EXCEPTIONAL CHILDREN
IN THE AREA FOR THE YEAR 1924.**

			Boys.	Girls.	Total.
Blind (including partially blind).	(i.) Suitable for training in a school or class for the totally blind.	Attending certified schools or classes for the blind	3	1	4
		Attending public elementary schools	..	..	..
		At other institutions	..	..	..
		At no school or institution	1	..	1
	(ii.) Suitable for training in a school or class for the partially blind.	Attending certified schools or classes for the blind	14	8	22
		Attending public elementary schools	6	3	9
		At other institutions	..	1	1
		At no school or institution	1	..	1
Deaf (including deaf and dumb and partially deaf.)	(i.) Suitable for training in a school or class for the totally deaf or deaf and dumb.	Attending certified schools or classes for the deaf	4	6	10
		Attending public elementary schools	1	..	1
		At other institutions	..	..	..
		At no school or institution	1	1	2
	(ii.) Suitable for training in a school or class for the partially deaf.	Attending certified schools or classes for the deaf	..	..	..
		Attending public elementary schools	..	6	6
		At other institutions	..	..	..
		At no school or institution	..	..	..

TABLE 11.—*Continued.*

			Boys.	Girls.	Total.
Mentally Defective	Feeble-minded (cases not notifiable to the Local Control Authority).	Attending certified schools for mentally defective children	..	..	..
		Attending public elementary schools	22	15	37
		At other institutions	1	..	1
		At no school or institution....	5	2	7
	Notified to the Local Control Authority during the year.	Feeble-minded	1	..	1
		Imbeciles	..	..	..
		Idiots.....	..	..	..
Epileptics.	Suffering from severe epilepsy.	Attending certified schools for epileptics	..	..	..
		In institutions other than certified special schools ..	..	..	..
		Attending public elementary schools.	..	..	..
		At no school or institution....	4	1	5
	Suffering from epilepsy which is not severe.	Attending public elementary schools	5	4	9
		At no school or institution....	1	..	1
Physically Defective.	Infectious pulmonary and glandular tuberculosis.	At sanatoria or sanatorium schools approved by the Ministry of Health or the Board	1	5	6
		At other institutions	1	2	3
		At no school or institution....	27	8	35
	Non-infectious but active pulmonary and glandular tuberculosis.	At sanatoria or sanatorium schools approved by the Ministry of Health or the Board	1	2	3
		At certified residential open-air schools	..	..	..
		At certified day open-air schools	..	..	..
		At public elementary schools	54	74	128
		At other institutions	1	1	2
		At no school or institution....	32	51	83

TABLE 11.—*Continued.*

			Boys.	Girls.	Total.
Physically Defective.	Delicate children (<i>e.g.</i> pre-or latent tuberculosis, malnutrition, debility, anaemia, etc)	At certified residential open-air schools	..	..	..
		At certified day open-air schools	..	..	..
		At public elementary schools	171	142	313
		At other institutions	3	10	13
		At no school or institution....	44	35	79
	Active non-pulmonary tuberculosis.	At sanatoria or hospital schools approved by the Ministry of Health or the Board	..	6	6
		At public elementary schools..	13	18	31
		At other institutions	..	1	1
		At no school or institution....	7	14	21
	Crippled children (other than those with active tuberculous disease) <i>e.g.</i> , children suffering from paralysis, etc. & including those with severe heart disease.	At certified hospital schools	..	..	..
		At certified residential cripple schools	1	..	1
		At certified day cripple schools	..	..	..
		At public elementary schools	65	38	103
		At other institutions	..	..	..
		At no school or institution....	4	7	11

TABLE 12.—RETURN OF DEFECTS TREATED DURING THE
YEAR ENDED 31st DECEMBER, 1924.

GROUP I.—TREATMENT OF MINOR AILMENTS
(Excluding Uncleanliness).

ELEMENTARY SCHOOLS.

Disease or Defect.	Number of defects treated, or under treatment during the year.		
	Under the Authority's Scheme.	Otherwise.	Total.
SKIN—			
Ringworm : Scalp	123	1	124
Body	105	..	105
Scabies	65	1	66
Impetigo	590	3	593
Other skin diseases.....	664	9	673
MINOR EYE DEFECTS—			
(External and other, but excluding cases falling in Group II.)	261	9	270
MINOR EAR DEFECTS	216	4	220
MISCELLANEOUS (<i>e.g.</i> , Minor injuries, bruises, sores, chilblains, etc.)	324	31	355
Total	2,348	58	2,406

HIGHER SCHOOLS.

Nil return for Group I.

GROUP II.—TREATMENT OF DEFECTIVE VISION
AND SQUINT (excluding Minor Eye Defects treated as
Minor Ailments—Group I.)

Disease or Defect.	Number of defects dealt with.							
	Under the Authority's scheme.		Submitted to re- fraction by private practitioner or at hospital apart from the Authority's scheme.		Other- wise.		Total.	
	El.	Hr.	El.	Hr.	El.	Hr.	El.	Hr.
Errors of Refraction (including squint) ..	438	22	12	4	..	..	450	26
Other defect or disease of the eyes	..	..	..	..	..	..	..	..
Total	438	22	12	4	..	..	450	26

Total number of Children for whom spectacles were prescribed—

	<i>Elementary.</i>	<i>Higher.</i>
(a) Under the Authority's Scheme	412	20
(b) Otherwise	12	4

Total number of Children who obtained or received spectacles—

(a) Under the Authority's scheme	323	15
(b) Otherwise	12	4

GROUP III.—TREATMENT OF DEFECTS OF NOSE
AND THROAT.

Elementary. Higher.

Number of Children—

(1) Received operative treatment:

(a) Under the Authority's scheme, in Clinic or Hospital	135	1
(b) By Private Practitioner or Hospital, apart from the Authority's scheme	17	..

(2) Received other forms of treatment....	104	..
---	-----	----

Total number treated.....	256	1
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GROUP IV.—TREATMENT OF DENTAL DEFECTS.
ELEMENTARY SCHOOLS.

(1) Number of Children who were :—

(a) Inspected by the Dentist :

	Age.	No.		
Routine age-groups	5.....	..	Total	3,264
	6.....	1,301		
	7.....	1,604		
	8.....	343		
	9.....	16		
	10.....	..		
	11.....	..		
	12.....	..		
	13.....	..		
	14.....	..		
Specials				287
Grand Total.....				3,551

(b) Found by Dentist to require treatment....	2,071
(c) Actually treated (by School Dentist).....	732
(d) Re-treated during the year as the result of periodical examination.....	..
(2) Half-days devoted to Inspection	54
Treatment	118—Total
	172
(3) Attendances made by children for treat- ment	947
(4) Fillings—Permanent teeth	434
Temporary teeth	.. —Total
	434
(5) Extractions, Permanent teeth	185
Temporary teeth	1,177—Total
	1,362
(6) Administration of general anaesthetics for extractions	35
(7) Other operations, Permanent teeth	35
Temporary teeth	19—Total
	54

HIGHER SCHOOLS.

One child in attendance at a higher school was specially in-
spected by the School Dentist, and two temporary teeth were
extracted.

GROUP V.—UNCLEANLINESS AND VERMINOUS
CONDITIONS.

	<i>1st</i> <i>Survey.</i>	<i>2nd</i> <i>Survey.</i>
(i.) Average number of visits per school made during the year by the School Nurses..	3	3
(ii.) Total number of examinations of children in the schools by School Nurses :		
(a) Children examined	15,686	8,069
(b) Examinations made	18,155	9,266
(iii.) Number of individual children found unclean	1,685	779
(iv.) Number of children cleansed under arrangements made by the Local Education Authority	..	..
(v.) Number of cases in which legal proceedings were taken—		
(a) Under the Education Act, 1921	..	..
(b) Under the School Attendance Byelaws	..	..

SANITARY ADMINISTRATION.

The details of the visits made by the Sanitary Inspectors, together with the number of notices served, and the sanitary improvements effected are set forth in the tables on pages 105 to 107.

A list of the adoptive acts, byelaws and regulations in force in the Borough was given in the Annual Report for 1920, and one or two additions made during 1921 and 1922 were referred to in the reports for those years. During the past year the Private Street Works Act, 1892, was adopted, and came into operation on 31st May, 1924.

Water Carriage System.

Further progress was made with the scheme for the conversion of privies to waterclosets, the areas dealt with being the remainder of Rekendyke Ward, parts of Deans and Tyne Dock Wards, and small portions of Simonside Ward. 1,176 conversions were completed during the year, making a total up to date of 2,274

As a result of action by the Sanitary Inspectors, 58 w.c.'s were installed because of insufficiency in the existing privy accommodation or to abate nuisances, 25 privy receptacles being abolished in this way.

Public Conveniences.

It has long been felt that additional public conveniences are urgently needed in many parts of the Borough. On that account a thorough survey of their districts was made by each of the sanitary inspectors, and by one of the health visitors. Several suitable or possible sites were indicated, and these were visited and inspected by members of the Health Committee.

The Borough Engineer drafted plans for conveniences at two sites, but no further progress was made before the end of the year. The proposed site at Westoe Fountain was opened up in the early part of the year, but it was found that the engineering difficulties were insuperable, and on that account this particular site was abandoned. The new convenience at Park Road, Cleadon, was completed during the year.

There can be no doubt that the inadequate provision of sanitary conveniences detracts greatly from the amenities of the Borough, especially as a holiday resort. Nowhere is this more acutely felt

than on the sea front. The existing accommodation in several other localities is also taxed beyond its legitimate use, with the result that nuisances are of frequent occurrence.

It is satisfactory to record that part of the suggested works was in hand at the end of the year.

Theatres, Cinemas, and Music Halls.

No important change has to be reported in regard to the number of these halls. They were regularly visited by the Sanitary Inspectors, the number of such visits being 62.

Offensive Trades.

There was only one new application for permission to open a fish-frying business in a converted dwelling-house. This was the subject of some little controversy, and permission was eventually refused on the grounds of the unsuitability of the premises.

The following is a statement of the character and number of the offensive trades that were in existence at the end of the year :

Fish friers	81
Tripe boilers	4
Gut scrapers.....	2
Tallow melter	1
Rag and bone dealers	5

The number of visits paid to these premises by the Sanitary Inspectors and the Food Inspector, and the defects dealt with are recorded on pages 105, 106, and 112.

Stables, Allotment Gardens, etc.

1,401 visits were paid by the sanitary inspectors to such premises.

During the year several complaints, formal and informal, were received in respect of these premises, and I made a large number of personal inspections both in connection therewith and on general sanitary grounds. As a result of these investigations I could not fail to come to the conclusion that far too many stables still exist in the more thickly populated parts of the town, and that they are a menace to the health of the community.

Apart from their odours, which are not necessarily prejudicial to health, these premises serve as breeding grounds for vermin and particularly for flies, which are liable to spread infection and disease especially amongst young infants. These possible dangers may be lessened by the frequent and regular removal of the manure and

refuse from the stables. On that account it was considered advisable to re-issue certain notices, by posters and advertisement in the local press, reminding owners of mews of their *statutory* obligation to remove such material from their premises within certain specified periods. The stricter enforcement of this statute would, I feel certain, be in the interest of the general health.

Street and Yard Paving.

As part of their scheme for the relief of the unemployed the Council carried out certain works in re-surfacing in concrete a number of streets and back lanes, and the same procedure was effected in several backyards at the instance of the sanitary inspectors. Such works undoubtedly improve the comfort, if not also the health, of the inhabitants.

Common Lodging Houses.

There were 15 occupied common lodging houses in the Borough at the end of the year. These contained 115 registered rooms with accommodation for 647 lodgers. Only one of these houses caters for female lodgers, accommodation being provided for seven.

Under Section 69 (2) of the Public Health Acts Amendment Act, 1907, the registration of thirteen of the keepers of these houses is renewable annually.

During the year the Sanitary Inspectors made 75 visits to these premises, and the special officer of the police made 520 visits.

Seamen's Lodging Houses.

At the end of 1924 there were 41 seamen's lodging houses within the Borough, with accommodation for 485 seamen. 105 visits were paid by the sanitary inspectors. The special officer of the police paid 1,763 visits to these houses.

Factories, Workshops, etc.

VISITS.

The Inspectors paid 789 visits during the year. Written notices were sent in 6 cases. There were no prosecutions. The details are as follows:—

1. Factories (including Factory Laundries).
Inspections, 57 ; Notices, 4.
2. Workshops (including Workshop Laundries).
Inspections, 437 ; Notices, 2.
3. Workplaces (other than Outworkers' Premises).
Inspections, 295 ; Notices, nil.

DEFECTS FOUND.

The defects and nuisances found are summarised below :—

Particulars of Defect.	Number of Defects.			
	Found.	Remedied.	Receiving attention.	Referred to H.M. Inspector.
<i>Nuisances under the Public Health Acts.*</i>				
Want of cleanliness	2	2	..	..
Want of ventilation	6	4	2	..
Overcrowding	..	..	..	..
Want of drainage of floors ..	..	..	..	..
Other nuisances.....	2	..	2	..
Sanitary accommodation—				
Insufficient	2	..	2	..
Unsuitable or defective..	9	3	1	5
Not separate for sexes ..	..	..	..	..
<i>Offences under Factory and Workshop Acts :</i>				
Illegal occupation of underground bakehouse (s. 101)	..	..	..	..
Breach of special sanitary requirements for bakehouses (s. 97 to 100)	3	3	..	..
Other offences (excluding offences relating to Outwork)	..	..	..	..
Total	24	12	7	5

*Including those specified in sections 2, 3, 7, and 8 of the Factory and Workshop Act, 1901, as remediable under the Public Health Acts.

REGISTERED WORKSHOPS.

The number of workshops on the Register at the end of the year was 405. The principal trades are :—

Dressmakers, Tailors, Milliners, etc.....	136
Boot repairers	25
Bakers	72
Joiners, Upholsterers, etc.....	51
Smiths	14

OUTWORK.

Only one employer sent in lists of Outworkers, in February and August, as provided by the Order. These lists contained only one name (a contractor) employed in the making of wearing apparel.

Inspection under the Shops Acts.

The nine local Orders in force in the Borough were detailed in the Annual Report for 1922.

The question of making a closing order for the trades of draper, milliner, etc., was under consideration at the end of the year, as a result of a petition from a number of the traders concerned.

The following is a summary of the work of the Shops Inspector during the past year:—

Number of shops on the Register at 31st December, 1924,	2,634
(In about 45 per cent. of these shops, assistants are employed).	
Number of visits paid to shops by the Inspector (including stalls in Market Place and stalls and cafes on North and South Beach)	5,695
Interviews and appointments	285
Complaints received and investigated	92
Infringements of the Shops Acts and Orders—	
Assistants employed about the business of the shop on their weekly half-holiday	..
Prescribed forms as to assistants' half-holiday not exhibited	46
Prescribed forms not kept up to date.....	47
Assistants not having proper meal hours.....	3
Young persons working excessive hours.....	..
Non-observance of weekly half-holiday	8
No weekly half-holiday notices exhibited	17
Selling non-perishable goods on closing day	5
Infringements of Early Closing Act, 1920 and 1921s ..	36
Infringements of Butchers' Closing Order	4
TOTAL	166

With one exception, the above-mentioned infringements were first offences. In each case the person concerned was cautioned by the Shops Inspector and reported to the Health Committee.

Of the 36 offenders against the Early Closing Acts, 1920 and 1921, 24 of the tradesmen were under the impression that the closing hour on the Thursday before Good Friday was the same as on Saturday evenings. They immediately closed their shops on their attention being drawn to the contravention. Another shopkeeper was in similar difficulty regarding the closing hour on New Year's Eve. No further action was taken by the Council in regard to these 25 cases, but proceedings were instituted before the magistrates in seven other cases; two were fined 10/- each, three were fined 5/- each, one was fined 2/6, and one was dismissed with a caution. Another tradesman who previously had been cautioned by the Inspector was cautioned by the Town Clerk on the instructions of the Council. The three remaining offences against the Early Closing Acts (1920 and 1921) were not dealt with other than by the warning of the Inspector.

The cases which were pending at the end of 1923 against two butchers were dealt with by the magistrates in 1924; one was fined 5/-, the other case was dismissed.

There is a reduction of 54 in the number of infringements actually observed by the Inspector as compared with the previous year. The reduction is almost entirely in the matter of not exhibiting or keeping up to date the prescribed forms and notices. From this it may be assumed that the Orders are being more conscientiously observed.

**TABLE 13.—SUMMARY OF NOTICES ISSUED
BY SANITARY INSPECTORS.**

	W. Clark	R. W. Weir.	R. Ayre.	W. Hill.	Totals
<i>Preliminary Notices were served on 285 Property Owners for—</i>					
(A.) Houses not kept in all respects reasonably fit for habitation ..	42	27	42	58	169
(B.) Nuisances caused by—					
Drains, defective or choked.....	3	12	17	5	37
W.C.'s defective	1	4	4	2	11
"Fowler" closet insanitary	..	..	1	..	1
Ashpit, nuisance from	..	..	1	..	1
Privy accommodation insufficient	1	2	..	..	3
Scullery sinks, insanitary.....	5	4	..	14	23
Underground rainwater cistern, foul	..	..	2	3	5
Pond, nuisance from.....	..	..	1	..	1
Water supply, none for house....	..	3	1	5	9
Drain, absence of proper.....	1	..	..	..	1
Yard paving defective.....	10	1	3	6	20
Minor defects.....	80	39	38	30	187
<i>Preliminary Notices were served on 160 Tenants for—</i>					
Dwellings overcrowded	..	..	1	7	8
Rooms dirty	1	..	8	5	14
Cellar used as sleeping place	..	..	..	..	..
Filthy yard, privy, etc.	2	2	8	4	16
Privy overflowing.....	..	1	2	..	3
Drains and w.c.s' choked.....	2	2	7	8	19
Animals causing nuisance	3	..	4	6	13
Manure and refuse accumulations	..	1	6	3	10
Depositing slop water on street ..	..	..	..	1	1
Depositing night-soil in ashbin ..	..	..	..	2	2
Filthy stall store	..	..	1	..	1
Dirty bakehouse	..	..	..	1	1
Making ice cream under insanitary conditions	..	..	1	..	1
Dirty fried fish shop.....	..	..	1	..	1
Absence of proper refuse receptacle (fried fish shop).....	1	..	1	..	2
<i>Statutory Notices : On Owners—</i>					
Under Public Health Acts*.....	..	..	..	..	10
Under Section 28, Housing Act, 1919.....	..	..	..	..	17
<i>Statutory Notices : On Occupiers—</i>					
Under Public Health Act, 1875 ..	..	..	..	..	1

* Exclusive of notices served by Town Clerk for privy conversions.

TABLE 14.—SUMMARY OF VISITS AND INSPECTIONS PAID
BY SANITARY INSPECTORS.

NATURE OF VISIT.	W. Clark	R. W. Weir.	R. Ayre.	W. Hill.	Totals
General district inspection (including housing inspection and inspection of underground rooms)	3,007	3,075	4,522	2,967	12,571
Inspection of repairs to property.....	1,107	118	850	155	2,230
Interviews and appointments	..	428	..	97	525
Investigation of complaints of nuisances	132	101	236	197	666
Testing drains	15	3	12	1	31
Smoke observations	1	1	..	..	2
Exhumations	3	..	..	..	3
Special Inspections—					
Re Inhabited house duty	6	..	9	..	15
Re Rent Act certificates	3	1	2	9	15
Seamen's lodging houses	..	75	9	21	105
Common lodging houses.....	..	17	45	13	75
Van dwellings, etc.	6	9	..	..	15
Picture halls.....	31	15	16	..	62
Bakehouses	..	..	5	16	21
Fried fish shops	48	..	78	4	130
Ice cream shops	8	1	12	..	21
Gutscraping place	..	..	1	..	1
Laundry	..	..	1	..	1
Marine stores	..	..	1	1	2
Farm buildings	8	..	..	..	8
Stables	160	158	69	16	403
Allotments	122	872	..	4	998
Re rat repression.....	44	21	7	2	74
Other factories.....	49	..	4	3	56
Other workshops.....	..	..	3	39	42
School	..	..	5	..	5
Public sanitary conveniences.....	..	17	64	13	94
Re conversions to water carriage system	..	484	..	1,956	2,440
Other visits	..	521	..	..	521
Taking samples with Food Inspector ..	109	..	..	..	109
Visits re cases of infectious disease : on notification of cases : or on dis-					
fection of premises	310	340	227	280	1,157
Re home treated cases	50	164	21	51	286
,, cases of tuberculosis	28	48	25	58	159
,, contacts of smallpox	34	13	20	37	104
,, ,, plague	5	13	1	14	33
,, ,, cholera	..	..	..	..	..
,, ,, other infectious diseases	5	6	3	18	32
Total visits.....	5,291	5,501	6,248	5,972	23,012

TABLE 15.—STRUCTURAL IMPROVEMENTS EFFECTED.

NATURE OF WORK.	W. Clark	R. W. Weir.	R. Ayre.	W. Hill.	Totals
Houses : generally improved.....	56	63	28	157	304
demolished	..	..	1	..	1
Public Houses : additional sanitary accommodation provided.....	..	..	11	..	11
Drains : abolished	..	..	..	..	..
provided	10	2	..	3	15
relaid	5	2	..	3	10
repaired	8	7	30	3	48
chambers, gullies, traps, etc., provided or renewed	20	12	..	8	40
Yards and Areas : relaid	6	..	1	2	9
repaired	22	1	..	3	26
provided	..	..	..	..	..
Privy Receptacles : newly provided	..	1	..	..	1
abolished (see also below)	..	..	10	..	10
rebuilt or repaired..	26	25	1	5	57
W.C.'s : newly provided (complete)....	10	5	7	10	32
provided in place of— privy receptacles.....	..	66	12	1113	1191*
basins, cisterns, etc., replaced or repaired	4	4	..	7	15
Dustbins : provided (fixed, 1 ; portable 1191)	2	66	..	1124	1192
Urinals : reconstructed or repaired....	..	..	..	3	3
Baths : provided (complete)	2	1	..	..	3
wastepipes or traps provided ..	3	..	..	4	7
Washups : of metal, replaced by stone- ware	1	1	..	8	10
newly provided (complete)	..	5	..	4	9
traps, wastepipes, etc., pro- vided or repaired.....	6	11	..	13	30
Lavatories : provided (complete)	..	2	..	..	2
traps, wastepipes, etc., provided or repaired..	..	2	..	..	2
Rainwater Cisterns (underground) :					
filled in	1	1	3	3	8
cleaned out or repaired.....	..	3	..	..	3
Wash-houses : rebuilt or repaired	16	4	..	1	21
floors relaid or repaired	..	2	..	1	3
Outbuildings : provided	..	2	..	..	2
rebuilt or repaired.....	26	20	..	21	67

*Including 1176 under Council's conversion scheme (See page 99).

HOUSING.

In spite of the urgency of the housing problem it is to be regretted that so little substantial progress has to be recorded during the year in dealing with overcrowded and insanitary areas.

In the course of the year I devoted a large amount of time to inspection of the houses and investigation of the conditions in the various "scheduled areas," particularly areas No. 1 and 2 (Wellington Street and Mitre Street areas). As these areas have formed the subject of previous detailed reports it is unnecessary for me here to make further comment.

It is to be noted that compared with 1923 more than twice as many houses were formally inspected and reported upon by the Housing Inspectors, while the number of additional houses reported to be either dangerous or not reasonably fit for habitation shows an increase of over 10 per cent.

Under the Increase of Rents, etc., Acts, 12 applications were received for certificates, two of which were not entertained.

The number of new houses erected during the year was only 225 compared with 284 in the previous year. There was a decrease of 105 in the number of houses erected by the Local Authority, but there was an increase of 46 in the number erected by private enterprise. The details are given in the subjoined table.

In my report for 1923 I referred to the fact that the Council had received permission from the Ministry of Health to proceed with the erection of 290 houses. Less than half of these had been completed at the end of the year. It is therefore evident that the housing demands for the year have been very far from met. It must be perfectly evident that unless provision is made not only to meet but even to greatly exceed the normal housing demands there can be little hope of effective treatment of the unhealthy and insanitary areas. The dilatory policy in housing reform is undoubtedly placing the future prosperity of the Borough in great prejudice. It does not appear to be sufficiently realised that the population of South Shields during the past four years has been increasing at least three times as rapidly as it did during the previous decade. To cope with the present rate of increase of population I am of opinion that a minimum of 400 additional houses per annum is necessary, and that even that number would do little to relieve the existing overcrowding.

SUMMARY.

Number of NEW HOUSES erected during the year :—

	Self Contained Houses.	Houses of Flats.	Total Houses.
(1) With State Assistance under the Housing Acts, 1919, 1923, or 1924—			
(a) By the Local Authority	132	Nil.	132
(b) By other bodies or persons	58	Nil.	58
(2) Without State Assistance	26	9	35
Total	216	9	225

1.—Unfit Dwelling Houses.

INSPECTION—

The four Sanitary Inspectors made about 20,000 inspections of dwelling houses, but many were duplicate visits to the same house.

- | | |
|--|-----|
| (1) Total number of dwelling houses inspected for housing defects (under Public Health or Housing Acts). (See note above.) | |
| (2) Number of dwelling houses which were inspected and recorded under the Housing (Inspection of District) Regulations, 1910 | 284 |
| (3) Number of dwelling houses found to be in a state so dangerous or injurious to health as to be unfit for human habitation | 15 |
| (4) Number of dwelling houses (exclusive of those referred to under the preceding sub heading) found not to be in all respects reasonably fit for human habitation | 275 |

2.—Remedy of Defects without Service of Formal Notices.

Number of defective dwelling houses rendered fit in consequence of informal action by the Local Authority or their officers.	231*
--	------

3.—Action under Statutory Powers.

A. *Proceedings under Section 28 of the Housing, Town Planning, etc., Act, 1919—*

- | | |
|---|----|
| (1) Number of dwelling houses in respect of which notices were served requiring repairs | 17 |
|---|----|

* Drainage defects and external nuisances excluded.

(2) Number of dwelling houses which were rendered fit—	
(a) by owners	8
(b) by Local Authority in default of owners ..	1
(3) Number of dwellinghouses in respect of which Closing Orders became operative in pursuance of declarations by owners of intention to close..	5
B. <i>Proceedings under Public Health Acts—</i>	
(1) Number of dwelling houses in respect of which notices were served requiring defects to be remedied	13
(2) Number of dwellinghouses in which defects were remedied :—	
(a) by owners	12
(b) by Local Authority in default of owners ..	..
C. <i>Proceedings under Sections 17 and 18 of the Housing, Town Planning, etc., Act, 1909—</i>	
(1) Number of representations made with a view to the making of Closing Orders.....	..
(2) Number of dwelling houses in respect of which Closing Orders were made	..
(3) Number of dwellinghouses in respect of which Closing Orders were determined, the dwellinghouses having been rendered fit.....	..
(4) Number of dwelling-houses in respect of which Demolition Orders were made	1
(5) Number of dwelling-houses demolished in pursuance of Demolition Orders.....	..

A Demolition Order was made in respect of one house, but it has not been possible to get the tenants out in order to carry out the demolition of the premises.

In three instances where the houses were considered unfit for human habitation, and in respect of which representations might have been made with a view to obtaining Closing Orders it was considered expedient to serve a statutory notice under section 28 of the Housing, etc., Act, 1919, and leave the owner to exercise his option of repairing or giving formal notice of his intention to close the premises. The owner adopted the latter course, but of the tenements affected five are still occupied.

There are also a number of other houses for which Closing Orders were made either just before or during the War or since the War ended, which are still occupied as dwellings.

FOOD.

As I have been specially interested and concerned in the question of the public food supply for many years, I made a special study of the conditions prevailing in South Shields. In the course of the year I paid over one thousand visits to food shops and market stalls and made inspections of the premises and the general conditions under which the food was stored, exhibited and disposed of for sale.

The conditions revealed in my inspections were not by any means satisfactory. Many premises now utilised for the sale of food-stuffs, both fresh and cooked, are, to my mind, unsuited for such purpose and constitute, indeed, a menace to the health and welfare of the community. It was no uncommon experience to find foodstuffs stored in living rooms, bedrooms, ill-ventilated cellars or in out-houses adjoining or not far removed from a privy receptacle.

As my investigation was in the nature of a general survey preliminary to making a full report on such conditions, I did not feel justified, for the time being, in singling out any particular individual cases for special action. Administrative action was therefore not pressed beyond verbal warnings and advice.

The matter of cleaner methods in handling food-stuffs has of late been rightly attracting a considerable amount of public attention and it formed a subject of timely discussion at the annual congress of the Royal Sanitary Institute during the course of the year.

Meat Inspection.

There are no private slaughterhouses in the Borough. All slaughtering in the way of trade must be done at the Public Abattoir, except with the consent of the Corporation. Such permission is occasionally given to members of the Arab community.

The following table gives the number of animals slaughtered during the last 8 years. The Abattoir was erected in 1906.

	1917	1918	1919	1920	1921	1922	1923	1924
Beasts	*5,494	4,760	3,858	3,348	3,394	2,988	2,940	2,699
Calves	487	35	357	193	203	189	413	192
Pigs ..	3,980	1,725	2,043	4,184	5,406	4,989	4,569	6,659
Sheep	31,368	23,812	16,911	19,985	32,996	27,901	19,197	16,246
Total	41,329	30,332	23,169	27,710	41,999	36,067	27,119	25,796

* Excluding 2,531 beasts slaughtered for the military authorities.

The decrease in the number of animals slaughtered during 1924 may be attributed to the prevalence during the early part of the year of foot and mouth disease, and probably also to some extent to the continued depression in trade, and to the increase in recent years in the amount of imported meat.

Visits of Inspection to Premises.

The following is a summary of the visits paid by the Food Inspector to the various premises under his supervision :—

	<i>No. of Premises at end of year.</i>	<i>No of Visits.</i>
‡Butchers' shops	163	} 1,639
Pork butchers' shops	17	
Fresh fish shops	17	
Fried fish shops	81	
Fish curing places	5	9
¶Milkshops and dairies	264	511
†Ice cream shops.....	70	14
Cowsheds	11	30
Bakehouses	72	116
Tallow boiling places	1	1
*Triperies.....	4	87
*Gut scraping places	2	37
Other premises and shops	..	1,612

* Inclusive of two tripe preparers and two gut-scrapers who use premises set apart at the public Abattoir.

† Number varies considerably—does not include stalls on beach in summer.

‡ Includes stalls in Market Place (average 19).

¶ Includes 104 milk shops registered for the sale of bottled milk only.

These premises are also visited by the Sanitary and Shops Inspectors.

It will be noted that there was a decrease in the number of butchers' shops in the Borough, corresponding to the decrease in the number of animals slaughtered at the Abattoir. There was also a decrease in the number of fresh fish shops and of milkshops and dairies.

Food Condemned and Destroyed.

The following are particulars of the food condemned and destroyed during the year—

AT THE ABATTOIR.

Beasts : 1 carcase of a bullock (Tuberculosis).
 7 carcasses of cows (Tuberculosis, 6 ; Extensive
 Bruises, 1).
 1 liver (Ulcers).
 1 head (Injuries).
 Sheep : 4 carcasses (Found dead, 2 ; Dropsy, 1 ; Broncho
 pneumonia, 1).
 Pigs : 7 carcasses (Found dead).

OUTSIDE THE ABATTOIR.

The whole of the undermentioned foodstuffs were condemned on account of decomposition or unsoundness, except where otherwise stated :—

Beasts : 260 lbs. imported beef (Bone Taint).
 140 ,, ,, (Strain).
 170 lbs. imported tripe.
 1 set lungs (Inflammation).
 1 liver (Ulcers).
 Calves : 8 carcasses.
 Sheep : 2 carcasses (Imported, 1 ; Home Killed, 1).
 Pigs : 1 carcase (Inflammation of Intestine).
 33 lbs. imported pork.
 4 cwt. heads (Bone Taint).
 3½ cwt. maws.

Tinned Goods, etc. : Beef (18 tins) ; Tongue (15) ; Chicken (55).
 Pork Roll (15) ; Meat paste (6) ; Salmon (25) ; Cray
 fish (4) ; Crab (1) ; Brislings (7) ; Lobster (1) ; Sardine.
 (1) ; Beans (1) ; Peaches (5) ; Pears (9) ; Pineapple (8) ;
 Salad (6) ; Tomatoes (29) ; Sauce (8) ; Ketchup (2) ;
 Pickles (1) ; Condensed Milk (178).

Other food : 4 tons potatoes.
 1 case dates.

Sale of Food and Drugs Acts.

The number of samples taken during the year and submitted to the Borough Analyst was 152, of which number 36 were taken informally. The following are particulars of the samples, results of analyses and of the action taken in certain cases.

All the samples of cream, butter, milk, margarine, and chicken and tongue paste were examined for preservatives, with the results as detailed below.

MILK :

35 samples of milk were taken (including 7 samples of dried milk, 1 of sterilized milk, and 1 of evaporated milk), 16 of which were informal samples.

31 were genuine.

4 were deficient, as under :—

(1), 3.3 per cent. in milk fat ; (2) 8.3 per cent. in milk fat ; (3) 3.2 per cent. in non-fatty solids ; (4) 7.0 per cent. in non-fatty solids (informal sample). Letters of caution were sent in the first three instances ; no action taken in case No. 4.

The Town Council's appeal against the local magistrates' decision in the milk case referred to in last year's annual report was heard in the King's Bench Divisional Court on 1st May, 1924. The question raised by the appeal was whether a farmer who sent milk to a purchaser by train in churns which were not locked or fastened was responsible if the milk on arrival at its destination was found to be adulterated by the addition of water, he having proved that he put the milk on the train without any adulteration, but not having proved that it was adulterated on the way. The case was sent back to the magistrates for further evidence and findings as to whether the milk was deficient in butter fat as the result of pilfering or whether it resulted from deficiency caused through the physical condition of the cows or the poorness of the pastures.

The magistrates re-stated the case, and it was again before the King's Bench Divisional Court on 22nd October, 1924. The Lord Chief Justice in giving judgment remitted the case to the justices with directions to convict or make an order under the Probation of Offenders Act, the respondent having failed to prove that the deficiency in fat as found in the analysis was the same as the deficiency when the milk was taken from the cow. The magistrates had no evidence, his Lordship added, as to the state of the milk when it was put on rail. The High Court declined to allow costs to the Corporation.

The case was subsequently before the magistrates when the defendant was fined 10/- . The Chairman of the bench in imposing the fine referred to the unsatisfactory state of the law with regard to the presumptive standard for milk, and also expressed the opinion that although defendant had been found guilty of a breach of the law, he did it without evil intent.

The obvious comment on the above case is that, in the interest both of the farmer and the retailer, all milk churns should be locked or otherwise sealed during transit.

CREAM :

6 informal samples of cream (preserved and fresh) were taken and are referred to on page 117.

BUTTER :

13 samples were taken of which 12 were genuine. One contained 0.6 per cent. excess of water ; a letter of caution was sent.

MARGARINE :

12 samples were taken. Each sample contained boric acid in the undermentioned proportion :—

0.15 per cent., 0.17 per cent., 0.21 per cent. (two samples),

0.22 per cent., 0.24 per cent., 0.27 per cent. (two samples).

0.33 per cent., 0.35 per cent., 0.37 per cent., 0.41 per cent,

No action taken.

TOMATO CATSUP :

1 sample was taken. It contained 0.84 grain of tin per lb. No action taken. The Analyst reported that it had probably been made from Italian puree sent over to this country in tins, and that this is very likely to contain dissolved tin compounds. He also stated that “in view of the quantity of catsup consumed by a person at one time, there is little fear of any direct injury occurring through the presence of the tin ; but I understand that this puree can also be shipped here in wooden kegs, and I think that if that could be encouraged, and the presence of tin in the catsup avoided, it would be all to the good.”

CHICKEN AND TONGUE PASTE :

1 informal sample taken. It was free from preservative.

RICE :

2 samples were taken, one of which was an informal sample. Both samples were free from mineral facing material.

SAGO :

- 1 sample taken ; it was reported by the Analyst as being entirely tapioca. He stated that " this is very frequent, and there appears to be a prevailing opinion that there is nothing wrong in selling tapioca as sago ; but a person who likes the flavour of sago is certainly prejudiced by receiving instead of sago, tapioca." No action taken.

MACE :

- 1 sample taken ; it was 100 per cent. cassia. In this case the Analyst was of opinion that there must have been a simple mistake as no dealer would wittingly give cassia instead of mace. No action taken.

BAKING POWDER, ETC :

- 2 samples of baking powder were taken ; both were genuine. They were tartaric acid powders.
- 3 samples of self-raising flour were also genuine.

" HEAD POWDER."

- 1 informal sample taken ; it consisted of acetanilide.

" CHEST AND LUNG MIXTURE."

- 1 informal sample taken. Nothing harmful was detected in the mixture.

" CASTOR OIL SUBSTITUTE."

- 1 informal sample taken. It apparently consisted of calomel and magnesium carbonate.

SWEETS :

- 4 samples were taken, including one informal sample. One of the samples of chocolates taken was reported by the Analyst as being of very poor quality, consisting of toffee covered with a very thin coating of chocolate. This chocolate coating contained somewhere about 30 per cent. of maize starch.—No action taken.

WHISKY :

- 1 sample taken. It was 40 per cent. under proof.—Letter of caution sent.

OTHER SUBSTANCES :

67 samples of the following substances were taken, all of which were genuine :—Barley, 2 ; Camphorated Oil, 1 ; Cassia, 3 ; Cinnamon, 1 ; Citrate of Magnesia, 1 ; Cocoa, 3 (1 informal sample) ; Cream of Tartar, 1 ; Flour, 3 ; Glycerine, 2 ; Gravy Salt, 1 (informal sample) ; Gregory Powder, 1 (informal sample) ; Ground Almonds, 1 ; Ground Ginger, 2 ; Ground Rice, 6 (1 informal sample) ; Lard, 8 ; Lemon Cake, 1 ; Lemon Cheese, 1 ; Liquorice Powder, 1 ; Malt Vinegar, 4 ; Mustard, 5 ; Oatmeal, 2 ; Pepper, 7 ; Rum, 1 ; Table Jelly, 1 ; Tapioca, 4 (1 informal sample) ; Tea, 2 (informal samples) ; Tincture of Rhubarb, 1 ; Yeast, 1 (informal sample).

Milk and Cream Regulations, 1912 and 1917.

All the samples of milk (35) taken for the purpose of chemical examination under the Sale of Food and Drugs Acts were examined for the presence of preservatives. None contained preservatives.

The following is a statement in detail of the samples of milk and cream taken during the past year :—

1. Milk ; and Cream not sold as Preserved Cream :

	Number of samples examined for the presence of a preservative.	Number in which a preservative was reported to be present and the percentage of preservative found in each sample.
Milk	35	Nil.
Cream ..	2	Nil.

2. Cream sold as preserved cream :—

(a) Instances in which samples have been submitted for analysis to ascertain if the statements on the label as to the preservatives were correct.

(i.) Correct statements made	4
(ii.) Statements incorrect	Nil.
(iii.) Percentage of preservative found in each sample.	Percentage stated on statutory label.
0.34 per cent. boric acid	Not exceeding 0.4 per cent. boric acid.
0.35 " "	
0.37 " "	
0.40 " "	

- (b) Determinations made of milk fat in cream sold as preserved cream.
- | | |
|-------------------------------|---|
| (i.) Above 35 per cent. | 4 |
| (ii.) Below 35 per cent. | — |
- (c) Instances where (apart from analysis) the requirements as to labelling or declaration of preserved cream in Article V. (1) and the proviso in Article V. (2) of the Regulations have not been observed Nil.
- (d) Particulars of each case in which the Regulations have not been complied with, and action taken Nil.
3. Thickening substances. Any evidence of their addition to cream or to preserved cream—
Action taken where found Nil.
4. Other observations, if any Nil.

